Whittier College Poet Commons

Fall 2009

## Whittier College Course Catalog 2009-2011 (Volume 90 • Fall 2009)

Whittier College

## Overview

Whittier College is an independent, four-year college distinguished by its small size, a nationally recognized liberal arts curriculum, strong pre-professional programs integrated into the liberal arts through innovative interdisciplinary programs, a high-quality faculty, a low student-to-faculty ratio, and a diverse student body.

Accreditation
Whittier College is regionally accredited by the Western Association of Schools and Colleges. You may contact WASC at:

985 Atlantic Avenue, SUITE 100
Alameda, CA 94501
(510) 748-9001

The Department of Education of the State of California has granted the College the right to recommend candidates for teaching credentials. The College's programs are on the approved
list of the American Chemical Society, the Council on Social Work Education, and the American Association of University Women.

## Notice of Nondiscrimination

Whittier College admits students of any race, color, national or ethnic origin to all the rights, privileges, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, color, marital status, sexual orientation, national or ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs, or athletic and other school-administered programs. Whittier College does not discriminate on the basis of disability in admission or access to its programs.

Fees, tuition, programs, courses, course content, instructors, and regulations are subject to change without notice.

## TABLE OF CONTENTS

OVERVIEW Inside Front Cover
ACADEMIC CALENDAR ..... 5-6
INTRODUCING WHITTIER COLLEGE ..... 7-19
President's Message ..... 7
Values ..... 8
Traditions ..... 8
Mission ..... 8-9
Undergraduate Admission ..... 9-10
Credential and Graduate Admission. ..... 11
Financial Aid. ..... 11
Scholarships ..... 11-12
Need Based Aid ..... 12-14
Endowed Awards and Scholarships ..... 14-18
COLLEGE LIFE ..... 20-27
The Faculty ..... 20
The Academic Advising System ..... 20-21
Endowed Professorships ..... 21-22
Recognition of Academic Achievement ..... 23
Career Planning ..... 23
Student Services ..... 24-27
Health Services. ..... 25
Student Rights \& Responsibilities ..... 27
ACADEMIC POLICIES AND PROCEDURES ..... 28-48
THE CURRICULUM ..... 49-58
Degrees ..... 49
The Liberal Education Program ..... 49-50
Whittier Scholars Program ..... 50-52
Writing Program ..... 52
Requirements for Graduation ..... 52-53
Requirements for the Major ..... 53

## TABLE OF CONTENTS

Requirements for the Minor ..... 53
Requirements for Transfer Students ..... 54
Academic Support Programs and Services ..... 54-58
COURSES OF STUDY ..... 59-61
Academic Divisions ..... 59
Course Numbering ..... 59
Departments and Course Descriptions ..... 62-204
SPECIAL PROGRAMS
Whittier Scholars Program ..... 205
International Programs (Study Abroad) ..... 206
Professional and Pre-Professional Programs ..... 207-210
Summer Program ..... 211
Urban Studies ..... 212
GRADUATE EDUCATION ..... 213-220
Application to Credential and Master of Arts ..... 214-216
Requirements for the Master of Arts in Education ..... 214-216
WHITTIER LAW SCHOOL ..... 221-222
EXPENSES ..... 223-226
COLLEGE ADMINISTRATION ..... 227-228
BOARD OF TRUSTEES ..... 229-231
FACULTY ..... 232-238
INDEX ..... 239-240
Orientation September 6-9
Fall Semester September 10-December 18
Fall Semester classes begin September 10
Last Day to Add a Course ..... September 17
Last Day to Drop a Course w/o Record ..... October 1
Last Day to File CR/NC Grade Option ..... October 8
Mid-Semester Break ..... October 16
Last Day to Withdraw from a Course. ..... October 22
Pre-registration for Spring \& Jan Terms ..... November 16-20
Last Day to Withdraw from College. November 19
Thanksgiving Break ..... November 26-27
Fall Semester classes end ..... Decemberll
Reading Day ..... December 14
Finals. December 15-18
Fall Grades Due in the Registrar's Office .December 21
JANUARY INTERIM 2010
January Interim ..... January ll-February 5
Martin Luther King Holiday ..... January 18
Last Day to Add a Course ..... January 15
Last Day to Drop a Course w/o Record ..... January 22
Last Day to File CR/NC Grade Option Record. ..... January 22
Last Day to Withdraw from a Course Record ..... January 29
Last Day to Withdraw from College ..... January 29
Jan term grades due. ..... February 10
SPRING SEMESTER 2010
Orientation for new spring students ..... February 8-10
Spring Semester ..... February 11-May 24
Spring Semester classes begin ..... February 11
Last Day to Add a Course. ..... February 18
Last Day to Drop a Course w/o Record ..... March 4
Last Day to File CR/NC Grade Option ..... March 11
Last Day to Withdraw from a Course. ..... March 25
Spring Break ..... April 5-9
Pre-registration for Fall \& Summer Terms ..... May 3-7
Last Day to Withdraw from College. ..... April 29
Spring Semester classes end ..... May 18
Reading Day ..... May 19
Finals ..... May 20-24
Senior Grades Due in Registrar's Office ..... May 25
Spring Grades Due in Registrar's Office ..... June 2
COMMENCEMENT 2010 ..... May 28
SUMMER TERM 2010
Summer Term ..... June 1-August 27
Summer Session I (4 weeks) ..... June 1-June 25
Summer Session II (6 weeks) ..... June 28-August 6Summer Session III (3 weeks)August 9-August 27

FALL SEMESTER 2010
Orientation September 5-8
Fall Semester ..... September 9-December 17
Fall Semester classes begin ..... September 9
Last Day to Add a Course ..... September 16
Last Day to Drop a Course w/o Record ..... September 30
Last Day to File CR/NC Grade Option ..... October 7
Mid-Semester Break ..... October 15
Last Day to Withdraw from a Course ..... October 21
Pre-registration for Spring \& Jan Terms ..... November 15-19
Last Day to Withdraw from College ..... November 18
Thanksgiving Break ..... November 25-26
Fall Semester classes end ..... December 10
Reading Day ..... December 13
Finals December 14-17
Fall Grades Due in the Registrar's Office December 21
JANUARY INTERIM 2011
January Interim January 10-February 4
Martin Luther King Holiday ..... January 17
Last Day to Add a Course ..... January 14
Last Day to Drop a Course w/o Record ..... January 21
Last Day to File CR/NC Grade Option Record. ..... January 21
Last Day to Withdraw from a Course Record ..... January 28
Last Day to Withdraw from College ..... January 28
Jan term grades due February 9
SPRING SEMESTER 2011
Orientation for new spring students ..... February 7-9
Spring Semester ..... February 10-May 23
Spring Semester classes begin ..... February 10
Last Day to Add a Course ..... February 17
Last Day to Drop a Course w/o Record ..... March 3
Last Day to File CR/NC Grade Option ..... March 10
Last Day to Withdraw from a Course ..... March 24
Spring Break ..... April 4-8
Pre-registration for Fall \& Summer Terms ..... May 2-6
Last Day to Withdraw from College ..... April 28
Spring Semester classes end ..... May 17
Reading Day ..... May 18
Finals ..... May 19-21,23
Senior Grades Due in Registrar's Office ..... May 24
Spring Grades Due in Registrar's Office ..... June 1
COMMENCEMENT 2011 ..... May 27
SUMMER TERM 2011
Summer Term May 31-August 26
Summer Session I (4 weeks) ..... May 31-June 24
Summer Session II (6 weeks) ..... June 27-August 5
Summer Session III (3 weeks). August 8-August 26

## INTRODUCING WHITTIER COLLEGE

## PRESIDENT'S MESSAGE

Whittier College's values - rooted in a distinguished and colorful history - echo throughout our campus. They characterize the four tenets of our liberal arts education: community, communication, cultural perspectives, and connections. And they characterize the small class size and the active and collaborative learning that takes place throughout the College. At Whittier, regardless of major, you will gain a breadth and depth of knowledge to prepare you for a lifetime of change and opportunity. You will build critical thinking and writing skills and connect theory to real world applications. You will gain awareness of your unique talents and find mentors among our distinguished faculty and loyal alumni to help you begin the path to your own career.
You will accomplish all of this on a campus named for poet John Greenleaf Whittier, who is known as much for his fiery abolitionist spirit and concern for social justice as for his poetry and ballads. You will take pride in being called a "Poet" yourself and in knowing that a long line of Poets preceded you, found a niche or two while on campus, graduated, and accomplished much in life.
When you contemplate how you will spend your years at Whittier and what you want to achieve afterward, consider this: Whittier has educated writers and artists, scientists and bankers, lawyers and teachers, and even a president of the United States. Within this catalog and on our friendly campus you will find the way to open doors to the opportunities you seek. Explore our rich offerings, sample Whittier's breadth and depth, and dream.

SHARON D. HERZBERGER, PH.D., President

## VALUES

Named for renowned 19th century poet John Greenleaf Whittier, our College is located in the hills overlooking metropolitan Los Angeles and coastal Southern California, and we take full advantage of our location in educating students. The College was founded by members of the Religious Society of Friends (Quakers) in 1887, but has been non-sectarian since the 1940s. Nonetheless, the social values associated with our Quaker heritage - freedom of conscience, integrity, internationalism, listening to others and building consensus - strongly influence the College's ethos. The campus has a friendly tone, and there is respect for people of all backgrounds and nationalities. Whittier has a long-standing commitment to a diverse student body and faculty, and the acceptance of difference that it thereby seeks to engender. Because of our values and our practices, a Whittier education prepares graduates to lead productive and meaningful lives.

## TRADITIONS

A college with a long and distinguished past has traditions that connect each new student with those who came before. The most important Whittier College traditions are those that mark both the initiation of new students into the College and the successful completion of their course of study. The President's Convocation, held on the first evening that new students arrive, formally inducts new Poets into the Whittier College community. This impressive ceremony begins with students marching through a corridor of faculty in full academic regalia and concludes with the igniting of candles to symbolize sharing the light of learning. Commencement, held in Memorial Stadium in front of family and friends, marks the conclusion of our students' academic journey at Whittier, but by no means the end to their association with the College. Beginning with a moment of silence in the Quaker tradition, the ceremony reaches its peak as graduates receive their diplomas against a backdrop of international flags, representing the home countries of our students and reflecting the Quaker spirit of internationalism and global unity.
Between these two important rituals are a host of traditions and events that build "Poet Pride." These range from the never-ending painting of the Rock, to Homecoming, Spring Sing, and Helping Hands Day. Celebrations of the diverse cultures represented by students and faculty include the annual Tardeada and Asian Night. And, of course we yell "Fear the Poet" at sporting events and on other occasions to exclaim our school spirit.

## MISSION

Faculty and students at Whittier College share a love of learning and delight in the life of the mind. They join in understanding the importance of the intellectual quest, the use of reason, and a respect for values. They seek knowledge of their own culture and the informed appreciation of other traditions, and they explore the interrelatedness of knowledge and the connections among disciplines. An extraordinary community emerges from professors and students representing a variety of academic pursuits, individuals who have come together at Whittier in the belief that study of the liberal arts forms the best foundation for rewarding endeavors throughout a lifetime.

Whittier College, an independent, nationally recognized liberal arts institution, provides an important option in American higher education: a distinctive, high quality academic program based upon the liberal arts that also integrates selected professional and pre-professional programs into the core of the College through innovative interdisciplinary curricula.
The College's primary mission is to educate students in a small college atmosphere where they can learn, acquire skills, and form attitudes and values appropriate for leading and serving in a global society. It seeks to do this in the context of a diverse, friendly, and caring community. Committed to excellence in undergraduate education, Whittier also offers selected advanced degrees in education and law.

## UNDERGRADUATE ADMISSION AND STUDENT FINANCING

Admission to Whittier College is competitive and students must demonstrate strong academic ability and preparation in order to be a successful candidate for admission. Candidates must show that they have the ability to prosper and be engaged learners within the Whittier academic community; scholastic ability, as demonstrated in previous coursework, is of prime importance. The Admission Committee practices careful, selective admission, but Whittier's concern for each student as a unique person is manifested in its admission policies and procedures. The special qualities, motivations, talents, background and interests of each applicant are assessed along with the more common measurements of academic ability. Further consideration is given to the applicant's commitments, leadership and initiative outside the classroom, as evidenced in school and community activities. Finally, the College is interested in the personal qualities that mark students as potential contributors to our vibrant learning community. Whittier College strives for a student body diverse in economic, social, ethnic, religious and geographic makeup, as well as in academic interests and talents.
All applicants to Whittier College receive individual attention and consideration throughout the admission process. Prospective first year and transfer students can apply for entrance in the Fall or Spring semesters. Detailed information concerning application requirements and deadlines can be found , by contacting the Office of Admission, or on the College web site (www.whittier.edu).

## First Year Student Admission

Whittier College strongly recommends that first year applicants enter with at least four years of English, three or four years of mathematics, two or three years of one foreign language, two or three years of social studies, and two or three years of laboratory science. Honors, Advanced Placement, and International Baccalaureate courses add further strength to an applicant's record and are considered favorably in the admission deliberations.

Credentials Required. Candidates for first year admission normally must provide the completed Common Application, a personal essay, high school transcripts, results of the Scholastic Aptitude Test (SAT1) or American College Test (ACT) with the ACT Writing Test, and two academic recommendations. Personal interviews are highly recommended but not required. Verification of the completion of the high school diploma must also occur prior to matriculation.

Non Binding Early Action. First year applicants who view Whittier College as one of their top choices can apply under the Non Binding Early Action Program. Under this program, candidates are free to apply to other colleges and universities, yet do not have to commit to Whittier until May l. Applicants for Early Action must submit all required credentials by December 1. Candidates are notified of their admission decisions by the end of December and have the opportunity to receive merit scholarship information in January.
Admission Decision Notification. Whittier College reviews all other first year applicants as they complete their credentials, with priority given to those students who meet the priority deadline of February 1. Admission decisions, along with scholarship and financial aid eligibility notifications, are mailed beginning in March. Students who wish to accept the offer of admission must provide a non $\neg$ refundable enrollment deposit by the National Candidates' Reply Date of May 1 to secure their place in the entering class. Enrollment deposits will be accepted after May 1 based on space availability in the first year class.

## Transfer Student Admission

Whittier welcomes students who wish to transfer from fully accredited community colleges and four-year institutions. Applicants in good standing who meet the admission standards are admitted to the appropriate class standing at Whittier College. Candidates may apply for entrance into the Fall or Spring semesters.
Credentials Required. Candidates for transfer admission must provide the completed Common Application, a personal essay, high school transcripts, and two academic recommendations. The results of the Scholastic Aptitude Test (SATl) or American College Test (ACT) will be required if the candidate has not completed at least 30 transferable academic units. Personal interviews are highly recommended but not required.
Regular Decision. Whittier College reviews all transfer candidates as they complete their credentials with priority given to those students completing the process by the priority deadlines. Notification of the admission decision is sent on a rolling basis upon receipt of all credentials. Students who wish to accept the offer of admission must provide a non-refundable enrollment deposit to secure their place in the entering class.
Transferability of Course Work. Whittier College will determine the number, type, and applicability of transfer credits to be accepted toward a student's degree. Whittier College will evaluate coursework taken at other regionally accredited institutions on an individual basis upon receipt of the official college transcript. A minimum of a C- must be attained in a course to be applied toward the Whittier College degree. Generally, remedial, professional, technical, vocational, work experience, co-op, and terminal coursework will not be accepted for credit. A maximum of 70 semester credits from a community college and a maximum of 90 credits from a four-year institution can be transferred.

## International Student Admission

International students are a vital part of Whittier College's community of learners and scholars. Applicants with strong academic credentials and demonstrated

English proficiency are considered for both first year and transfer admission. In addition to the documents listed previously, international applicants are required to submit a Certificate of Finances and the results of the TOEFL, if English is not the first language (a minimum of 550 paper score, 213 computer score, or 80 internet based score is strongly recommended). All transcripts and other documentation must be translated.
Those who wish to transfer credit from a post-secondary institution outside the United States are required to have their coursework evaluated by an external credit evaluation agency. International candidates are urged to complete the process early to allow sufficient time to satisfy visa and immigration requirements.

## Admission to Non-Degree Standing

Non-degree standing is granted to a limited number of students who are not currently interested in seeking a degree at Whittier. To apply for non-degree standing, students must submit a transcript from the last institution attended, proof of attainment of the high school diploma, and the appropriate application form. Additional credentials may be requested if needed to make a determination. Nondegree standing is based on the academic credentials of the candidate, his or her intent in continuing the course of study at Whittier, and the availability of space at the College. Students must reapply to continue non-degree standing each semester. A non-degree student must satisfy the English proficiency requirement for degree candidates at the College. A student may transfer no more than 30 credits of courses taken at Whittier College under non-degree status toward a Whittier College Bachelor of Arts and no more than 12 non-degree credits toward the Master's degree at the College. To request a non-degree application or more information, contact the Office of The Registrar.

## CREDENTIAL AND GRADUATE ADMISSION

Admission to either the credential or the Master of Arts program is selective; meeting the minimum requirements does not guarantee admission to either program. (See Graduate Education, beginning on page 213)

## FINANCIAL AID

Whittier College offers a full range of programs to help students pursue their education which include: merit scholarships which recognize outstanding academic achievement, leadership, service, or talent; need-based grants, loans, and work programs for families who need assistance in meeting college costs; and alternative financing plans.

## Scholarships

Academic Scholarships. Each year the faculty honors a select group of entering first year students with prestigious awards in recognition of academic achievement, leadership, service, or special talent. The John Greenleaf Whittier Scholarships range from $\$ 4,000$ a year to full tuition; financial need is not a consideration in granting these awards. Winners are expected to participate in the leadership of the College community and will in turn benefit greatly from their special relationship with the faculty and their peers. These awards are renewable for up to four years of continuous study at Whittier College if the student maintains the specified grade
point average and remains in good standing with the College.
Talent Scholarships. These awards are offered to entering first year students in the areas of art, music, and theatre arts. Winners are expected to enrich our community through the use and sharing of their talent but are not required to major in their talent field. Auditions and/or portfolio reviews are required by each talent scholarship department in the spring of the senior year in high school. These awards are also renewable for up to four years of continuous study at Whittier College as long as the student continues to participate in and contribute to his or her talent area, meets specified departmental criteria, and remains in good standing with the College.
Alumni Scholarships. These awards are offered to sons and daughters of Whittier alumni and are valued at $\$ 1,000$ per year for a maximum of four years. Qualified applicants may receive this award in addition to John Greenleaf Whittier Merit and/ or Talent Scholarships.

## Need-Based Aid

Whittier College believes that a diverse student population adds to the richness of an education. This philosophy is evidenced in our support of scholarship and financing programs and, most importantly, in the College's commitment to providing funds for deserving students who otherwise could not attend.
Families participating in need-based aid programs agree to several commitments. Foremost among these is that parents and students must support the student's educational expenses to the extent that they can, and students must seek all available outside sources of funding. For California residents, this includes applying for the Cal Grant awards. Other sources of funds may include high school, church, community, or corporate-sponsored awards. The College will evaluate each family's ability to pay on the basis of a nationally accepted formula. In determining a family's need for assistance, all costs associated with a Whittier education are considered, including tuition, fees, books, supplies, room and board, and transportation.
Whittier College utilizes funds from the federal and state governments, donors, and our own resources to assist families in meeting costs that cannot be afforded or covered by other outside resources. These funds take the form of grants, loans, and work awards for undergraduate students. Graduate and credential students are considered for loan support only. Grants are gifts of money that do not have to be repaid. Loans are normally low-interest and do not require repayment while the student is in school. Work awards allow students to earn funds to cover a portion of their expenses while gaining valuable work experience. The amount, source, and terms of each award offered an applicant are detailed in the student's award notification letter.

Eligibility: To be eligible for need-based aid, a student must be either a citizen or an eligible non-citizen of the United States. Applicants must be enrolled in a program of study at Whittier College that leads to a degree, approved certificate, or credential. Many programs require at least half-time enrollment while most require
full-time enrollment. Applicants must not be in default on repayment of any student loan or owe refunds for federal grant funds. Students must continue to maintain satisfactory academic progress toward their degree as defined by College policy (available from the Office of Financial Aid).

## HOW TO APPLY

The Office of Financial Aid is committed to helping students identify and obtain the maximum need-based assistance available.

Entering Students. To be considered for funding, new students should follow the steps outlined below. For priority consideration, all three steps must be completed by February 15 of the preceding academic year.

Step 1: Apply for admission to Whittier College by completing the Common Application. Applicants need not wait for an admission decision before proceeding to Step 2.
Step 2: Complete the Basic Asset Data Sheet (available online) and return it to the Office of Financial Aid.
Step 3: Complete the Free Application for Federal Student Aid (FAFSA) online at www.fafsa.ed.gov. Whittier College's school code is 001342.
California residents should be sure to complete the statement of their California residency to apply for the Cal Grant. Whittier College must be listed in the school section.
Admitted students who meet the priority filing date may be mailed a detailed eligibility letter starting on April 1. Students who decide to accept the offer and attend Whittier College may be asked to provide documentation supporting the financial information reported on the FAFSA prior to disbursement of funds.

Continuing Students. Continuing students must apply for renewal of their assistance each year. To apply for renewal, students must file the Free Application for Federal Student Aid (FAFSA) by March 2 of the year preceding the academic year. Students also must submit a Renewal Request form with the Office of Financial Aid. Applicants who are required to submit additional information and documentation will be notified.

International Students. A limited amount of assistance is available to international students who otherwise would not be able to attend Whittier College. The awards are based on academic promise and financial need. Information on award amounts, availability, and application requirements is available from the Office of Admission.
Alternative Financing Plans. Many families who have the resources to afford a Whittier education, as well as those who wish to augment their need-based assistance, may wish to spread the payment of college expenses over the course of the year or longer. The following financing programs may be used by families as they engage in planning for their children's education.
Short-Term Financing. Whittier College participates in a short-term payment plan through Academic Management Services (AMS). The AMS plan has been designed to relieve the pressure of large "lump sum" payments by allowing families to
spread the cost of education over ten months without borrowing money or paying interest charges. A small application fee is required per school year, and the plan automatically includes a Life Benefit Coverage. Payment under the plan normally begins on June 1 prior to the designated academic year. Application for participation can be made through mid-August with an applicable down payment required.
Long-Term Financing. These plans allow families to pay in smaller installments over a longer period of time, normally from five to twenty years. The loans are made in coordination with the Office of Financial Aid, through outside lending institutions or agencies in amounts ranging from $\$ 500$ per year to the cost of full expenses at Whittier College. Participation in the plans is based on the borrowers' credit worthiness and ability to repay. Applications are normally made in June for the following academic year.

## WHITTIER COLLEGE ENDOWED AWARDS AND ANNUAL SCHOLARSHIPS

Whittier College has a long and proud tradition of providing scholarship support to its deserving and talented students. Annually, $70 \%$ of our students receive some form of College-funded grant support. This is made possible in part through the generous support of the loyal and dedicated scholarship donors - alumni, friends, foundations and organizations - who have chosen to invest their philanthropic dollars in our remarkable students. Without their continuous and generous support, many qualified students would not be able to take advantage of a Whittier education. Students are considered for these annual and endowed awards through the admission and financial aid application processes.

## Endowed Awards

Carl W. Ackerman Endowment
Edward and Rosa Ahlswede Endowment
Max B. and Ruth B. Alcorn Endowment
Thelma Sprague Allen Endowment
Harvey B. \& Madge W. Alverson Music Endowment
Madge W. Alverson Speech \& Drama Endowment
Dr. John A. Arcadi Endowment
Ethel Townsend Ball Endowment
Banco Popular Endowment
Mabel H. Bankhead Endowment
Granville B. and Helena Barrett Basye Endowment
Alva G. Bellah Endowment
Eva B. and Harry C. Billings Endowment
Ralph E. and Eula Bishop Endowment
W. O. and Otis A. Brown Memorial Endowment

Hazel Caldwell Endowment
Class of 1934 Richard Spaulding Endowment

Class of 1957 Endowment
Class of 1961 Endowment
Class of 1968 Endowment
Genevieve Shaul Connick Memorial Endowment
Dr. C. J. Cook \& Evelyn Jessup Cook Endowment
Charles W. and Edris Cooper Drama Prize Endowment
Ruth Schaefer Corzine Endowment
Sylvia Marie Cosand Endowment
Joseph P. and Kathleen Cosand Endowment
Ardys M. Cox Endowment
Lex B. Cox International Endowment
John H. Crow Endowment
James and Ida Scholer Darling Endowment John F. \& Katherine N. Dean Education Endowment Richard and Billie Deihl Teaching Scholarship Grace Elizabeth Dickerson Endowment Floyd E. and F. Earl Durham Biology Endowment Mr. \& Mrs. Thomas McGregor Erwin Endowment Richard P. Ettinger, Jr. Endowment Herbert F. \& Elizabeth S. Evans Endowment Elizabeth Delia Felt \& Jessie Felt Savage Endowment William \& Christine R. Ferguson Memorial Endowment Roberta J. Forsberg Humanities Endowment Jeffrey Thomas Foster Memorial Endowment Judith A. Francis Endowment Vivian Schulte Gardner Endowment
Robert L. Gifford Eagle Scout Endowment Hilda Mary Millbank Gobar Endowment Sally Ann Randall Gobar Endowment Bernard and Esther Goerg Endowment Carol Collins Gordon Endowment Stanley and Marjorie Gregory Endowment Barbara Ondrasik Groce Endowment

Gordon \& Llura Gund Scholarship
Shirley and Donald Hall Endowment
Homer and Cora Halvorson Memorial Endowment
Edna M. Hampton Memorial Endowment
Arthur J. Hanson Endowment

Clair R. Hare Endowment
Ruth Haroldson Violin Endowment
William Randolph Hearst Foundation Endowment
Dorothy C. Heddens Memorial Endowment
Dee Louise Hochstetler Memorial Endowment
Howard L. and Alice B. Hockett Endowment
Lawrence B. \& Sylvia A. Hoefer Endowment
William H. Hornaday Endowment
Bailey Howard Endowment
Wendell Milo Hunt Memorial Endowment
James Irvine Foundation Endowment
Lois E. James Educational Endowment
James W. Jones Endowment
Laura Jones Endowment
Lynn R. and Katherine Balden Juday Endowment
Donna Lee Kendall Endowment
William H. and Irene Savage King Endowment
Paul D. Kirk Memorial Endowment
Joseph and Sybil H. Landon Endowment
Paul A. and Frances K. Lewis Endowment
Jay R. and Elizabeth T. Livingston Endowment
Margaretha Lohmann Piano Endowment
Margaretha Lohmann Talent Endowment
James R. Long and John M. Gates Memorial Endowment
Albert Madden Endowment
Markham Endowment
Charles K. Marlatt Memorial Music Endowment
George H. Mayr/Martin Ortiz Endowment
Harry Maxwell McPherson and Jessamyn West McPherson Endowment
Milhous-Marshburn Endowment
Mary McGraw Miller Music Endowment
Beulah Bartlett and Blyethe Monroe Endowment
John and Elsie Murfett Endowment
Delphi Murphy Memorial Endowment
Wallace "Chief" Newman Endowment
Dr. W. Roy and Alice Newsom Endowment
Dr. W. Roy Newsom Endowed Scholarship for Chemistry
John Hill Nichols Endowment
Sinara Stull O'Donnell Memorial Endowment
Martin Ortiz Endowment
Lee \& Erika Owens Endowment
Shirley M. Parcher Scholarship
Edward M. Paterson Memorial
Dr. Gerald Patton Memorial Endowment
Perry Memorial Endowment
Sissel \& Richard Pomboy Endowment
Edwin and Margaret Larson Pressey Endowment
Marcus Quarles Endowment
Audrey Richardson Memorial Violin Endowment
Henry C. Rosene Endowment
Paul K. and Nina Schroeder Memorial Endowment
Lela Layne Semans Endowment
Marie Quinzel Sewell Endowment
Margaret Merrill Shannon Endowment
Robin Hill Sinatra Memorial Endowment
Vincent Sinatra Memorial Endowment
Delphine P. Smith Endowment
Elden and Barbara Smith Endowment
Nora \& Woody Smith Endowment
Walter H. and Helen J. Spicer Endowment
John Stauffer Science Fellows Endowment
John Stauffer Trust Science Endowment
Alfred J. Stevens Memorial Endowment
Martin A. and Mildred L. Stewart Endowment
Bobbie Stoll Journalism Endowment
Emma Strain Endowment
Roy Q. and Lisle M. Strain Endowment
Amos and Matilda Hadley Stuart Endowment
Charles E. Sydnor-William V. Marshburn Endowment
Talbott Family Mathematics and Computer Science Endowment
George K. Tenopir Endowment
Lorraine Thompson Endowment
Raymond C. Thompson Endowment
Gary Towell Endowed Scholarship
Helen Ulitin Endowment
Frances E. Van Riper Endowment

May Vertrees Endowment
George E. and Maye J. Wanberg Endowment
Bonnie Bell Wardman Endowment
Whittier College Friends of Music Endowment
Whittier College Veterans Endowment
David E. Wicker Endowment
Dwight L. and Mary A. Williams Endowment
Neal, Devon, and Ian Williams Memorial Endowment
Ed J. \& Ruth Wudell Endowment
Mary E. Wyatt Memorial Endowment
YMCA Daniel Luther Endowment
Annual Scholarships
Ahmanson Foundation Scholarship
Assistance League of Whittier Scholarship
Christian Leadership Merit Scholarship
Nola Lee Cole Trust Scholarship
Los Angeles Philanthropic Foundation Scholarship
Norma L. Murdy Scholarship
Richard M. Nixon Scholarship (Whittier Republican Women)
James R. Parks Fellowship
James R. Parks Prize
Ann Peppers Foundation Scholarship
President's Council Annual Scholarships
Rose Hills Foundation Science and Engineering Scholarship
William A. and Rosamond Laird Smith Trust Fund Scholarship
TELACU Matching Scholarship
Trustee Circle Annual Scholarships
Whittier College Women's Auxiliary Scholarship

## Student Rights and Responsibilities Regarding Financial Aid

Whittier College subscribes to the professional standards of the National
Association of Student Financial Aid Administrators and urges students to know their rights and responsibilities.

## Student Rights

Whittier College students have the right to know the following: which financial aid programs are available; application deadlines for each of the programs available; how financial aid will be distributed, how distribution decisions are made, and the bases for these decisions; how financial need was determined, including how
costs for tuition and fees, room and board, travel, books and supplies, personal and miscellaneous expenses were considered in the budget; how much of the financial need has been met, as determined by the Office of Student Financing; what resources (such as parental contribution, other financial aid, and personal assets) were considered in the calculation of the need; what portion of the financial aid received must be repaid and what portion is grant aid (if a loan is awarded, students have the right to know the interest rate, the total amount to be repaid, repayment procedures, the date when repayment begins and the length of the repayment period); how the school determines whether students are making satisfactory academic progress and what happens if they are not; and an explanation of each program in the student aid award package.

## Student Responsibilities

Whittier College students must complete all application forms accurately and submit them on time to the correct location; provide correct information (in most cases, misreporting information on financial aid applications is a violation of the law and may be considered a criminal offense); return all additional documentation, verification, corrections, and/or new information requested by either the Office of Student Financing or the agencies to which applications were submitted (students are responsible for reading and understanding all forms they are asked to sign and for keeping copies of each); accept responsibility for all signed agreements; perform the work agreed upon in a work-study award; be aware of and comply with the deadlines for aid application or reapplication; know and comply with Whittier College's refund procedures; maintain satisfactory academic progress according to the policies and standards of the College; notify the Office of Financial Aid in writing of any change in the circumstances reported on the student financing application upon which aid is based or if any additional awards from an outside source will be received; and notify the lender of changes in name, permanent mailing address, and school status, if a loan was received as part of the award package.

## Veteran's Benefits

Whittier College is approved to train veterans under Title 38, Chapter 36, U.S. Code Sections 3671(a) and 3672(a). Eligible individuals must submit copies of their honorable discharge, VA eligibility and transcripts of all previous educational experiences for review. See the VA Coordinator in the Registrar's Office for further information.

## COLLEGE LIFE

Olv:hittier College students join with faculty and staff to form a community of learners. The purpose of this section is to describe residential living, co-curricular opportunities, student rights and responsibilities, and administrative support for students. The section starts with the faculty, the most important and influential people students encounter in the Whittier College community.

## THE FACULTY

The Whittier College faculty exhibits a rare quality in American higher education: a commitment to balancing the teaching of undergraduate students with scholarly accomplishment. Our finest teachers are also nationally recognized scholars who have won awards for their books, research and other creative activities. In recent years, faculty have published numerous books on topics ranging from the Chinese revolution to European currency, have exhibited in juried art shows and directed plays in Hollywood.
An accomplished faculty wins awards. The Whittier College faculty has a strong history of receiving National Science Foundation fellowships, Fulbright fellowships and lectureships, Graves Awards, NASA summer fellowships, Haynes Foundation awards, and grants from the National Endowment for the Humanities. Accessible to students not just in the classroom or during office hours, Whittier faculty often open their homes to students for honorary society and departmental meetings, or sometimes just good conversation.

## THE ACADEMIC ADVISING SYSTEM

Academic advising is an essential part of the educational experience at Whittier, since we believe that advising is closely connected to teaching. In 2009 a new advising resource center was created and housed in the Center for Advising and Academic Success, CAAS, located on the ground floor of the library. The new center offers resources and guidance to students and compliments the faculty advising model at Whittier College.
From the moment new students step on campus, faculty advisors are ready to assist in charting student's curricular path. This careful advising ensures that our students graduate in four years-not five or six, as in larger institutions. It also results in our students' admission to the country's finest graduate programs in medicine, law, and the arts and sciences, in addition to winning prestigious awards ranging from NCAA Student Athlete awards to the prestigious Rhodes Scholarship.
The primary purpose of advising and mentoring programs is to support students in the development of an academic career complementary to individual life goals. The College provides the students with all the necessary information and resources required in making meaningful educational plans. At Whittier, students obtain academic and career advising from faculty and staff who are pro-active in promoting excitement about the learning process. As students develop a habit of life long learning and continuing inquiry, they assume active roles in educational planning and make satisfactory progress in their academic careers. In keeping with
the values of the shared learning experience at Whittier College, faculty mentors serve as role models and provide primary advising for students.
In recent decades emphasis on advising and student success have placed particular attention on first year students. It is recognized that the first year requires transition and adaptation to college. As part of the first year at Whittier College each new student is assigned to a Learning Community in which they enroll in two linked classes together. First year students are also assigned a full time faculty member referred to as a "mentor" who provides academic support and direction through the first year. It is the primary role of the first year mentor to introduce the new student to Whittier College, and to further an understanding of its overall mission and the importance of a liberal education. Mentors also help students become aware of the many resources available to them on campus. Overseeing all of the first year programs is an Associate Dean of First Year Programs and Advising. It is her responsibility to develop programming and provide support to all first year students. Student success is our primary objective.

## ENDOWED PROFESSORSHIPS

Endowed professorships lend distinction and strength to the Whittier College faculty. These named chairs are bestowed upon faculty whose research, teaching and/or public service have uniquely contributed to the mission of their department and the College. In addition to the academic honor, the endowed professorship provides funding for the faculty member's teaching, research, and service responsibilities.

## The Roy E. and Marie G. Campbell Distinguished Chair in Biology

Dr. Roy E. Campbell, director of the U.S. Entomological Laboratory, provided for the Endowment of a chair in Biology from the proceeds of his estate. The Campbell Chair supports a distinguished faculty member in that department, and assists the College in enriching teaching and research activities.

## The C. Milo Connick Chair in Religion

Named in honor of C. Milo Connick, former professor emeritus of Religion and college trustee, this endowed chair provides funds for support of distinguished faculty in the field of Religious Studies. Funding for the chair was made possible through the support of C. Milo Connick, Richard and Sharon Ettinger, Jr. and Ray and Joan Dezember.

## The Genevieve Shaul Connick Chair in Religion

Named in honor of Genevieve Shaul Connick, wife of Dr. Milo C. Connick, former professor emeritus and college trustee, this endowed chair provides support for a faculty member in Religious Studies. Funding for the chair was provided by the Estate of C. Milo Connick with matching funds from Whittier College.

## The Richard and Billie Deihl Distinguished Chair

Richard Deihl '49 and his wife Billie (Beane) Deihl '50, both alumni, established this endowed chair in 1993 to provide funds for support of a distinguished scholar. A prominent executive in the financial services industry, Richard served on the Whittier College Board of Trustees from 1970-1982 and from 1992-2002, and was named Trustee Emeritus in 2006.

The Douglas W. Ferguson Chair in International Economics
Named in honor of Douglas W. Ferguson, long-time member of the Whittier College Board of Trustees, the chair was endowed at the time of his retirement as Chief Executive Officer, Quaker City Federal Savings and Loan. The endowed chair provides funds for support of a distinguished
faculty member in the field of international economics.

## The James Irvine Foundation Chair in the Biological Sciences

Established through the generosity of the James Irvine Foundation, this endowed chair provides for the support of a faculty member in the field of Biological Sciences, who has distinguished him/ herself as an instructor, researcher and author.

## The Fletcher Jones Chair in Molecular Biology or Genetics

The funding for the Fletcher Jones endowed chair was generously provided through the Fletcher Jones Foundation. This Endowment provides funds for support of a distinguished faculty member in the field of Molecular Biology or Genetics.

## The Hazel Cooper Jordan Chair in Arts and Humanities

The Hazel Cooper Jordan Chair in Arts and Humanities was established in 2007 with a gift from Dr. Chester "Chet" McCloskey '40, and his wife, Olive (Jordan) McCloskey '44, in memory of Olive's mother, an alumna in the Class of 1912. Its purpose is to maintain and enhance Whittier College's contribution to the languages and the humanities.

## The Chester and Olive McCloskey Chair in Chemistry

This fund was established in 2007 by Dr. Chester "Chet" M. McCloskey ' 40 and Olive (Jordan) McCloskey " 40 to support the teaching, research, and services of an outstanding professor of Chemistry who embodies inspirational and dedicated teaching in the sciences.

## The John A. Murdy Chair in Business Administration and Economics

Funded by the Murdy Foundation and Trustee Emerita Maxine Murdy Trotter '47, the John A. Murdy Chair in Business Administration and Economics is named in honor of Mrs. Trotter's father, former state senator John A. Murdy, Jr. and her brother John A Murdy III, a member of the Class of 1950 and a former college trustee. The Chair provides support for a faculty member in the departments of business or economics.

## The W. Roy and Alice Newsom Chair in Chemistry

Named in honor of the late Roy Newsom, tenth President of Whittier College, and his wife Alice. The Newsom Chair provides support for an outstanding scholar/ teacher in Chemistry. W. Roy Newsom was a leader at Whittier College for forty years: 1934 graduate, Professor of Chemistry and department chair, Dean of the College, Vice President for Administration, and President of the College.

## The Richard M. Nixon Chair in Public Policy

This chair honors President Richard M. Nixon, distinguished public servant and Whittier College graduate in the class of 1934. This specially endowed program, established by his family and friends, enables the College to bring outstanding scholars to campus each year for seminars and public lectures on issues related to public policy.

## The Albert Upton Chair in English Language and Literature

The Albert Upton Chair in English Language and Literature commemorates the director of Whittier's earlier liberal education curriculum, the General Studies Program, and the designer of a semantically oriented freshman English course, Design for Thinking. The holder of the Upton Chair is committed to the teaching of writing, and plays an important role in the College's writing program.

## The Nadine Austin Wood Chair in American History

Named in honor of Nadine Wood, the late wife of Donald "Bill" Wood L.H.D. '98, trustee and college treasurer, this endowed chair provides support for a faculty member in American History. Nadine was active in community organizations, particularly the Whittier Historical Society, and the Friends of the Shannon Center. Bill has been a college trustee since 1975.

## RECOGNITION OF STUDENT ACADEMIC ACHIEVEMENT

Honoring our students' academic achievements is among the most important things Whittier College does. From national honor societies to the Dean's List and honors at graduation, we take pride in and recognize academic achievement.
Whittier College supports the following national honorary and leadership societies:

Alpha Psi Omega (Drama)<br>Nu Mu Rho (Chemistry Honor Society)<br>Omicron Delta Kappa<br>Phi Alpha Theta (History)<br>Pi Sigma Alpha (Political Science)<br>Psi Chi (Psychology)<br>Sigma Pi Sigma (Physics)<br>Sigma Tau Delta (English)<br>Sigma Delti Pi (Spanish)<br>Theta Alpha Kappa (Religion Honor Society)

## Honors Convocation

A formal convocation, with faculty marching in full academic regalia, is held each spring semester to honor students with outstanding academic achievements. In addition, students and faculty honor one faculty member each year with the Harry W. Nerhood Teaching Excellence Award.

## CAREER PLANNING

The Career Planning Office assists students in choosing, planning, and implementing their career-related goals. The primary services include consultation in choosing a major career planning, career preparation, and job search assistance for Whittier College students, as well as for alumni.

Career planning services include individual counseling, self-assessment workshops, assessment inventories, a career planning course, and materials in a career resource library. Career preparation involves the development of internship and other forms of career-related work opportunities to assist students in acquiring career-related skills and experience prior to graduation. The Career Planning Office also maintains directories and information on graduate school programs as well as offers practice graduate and professional school exams. An annual Graduate and Professional School Fair provides exposure to post-graduate opportunities for those interested in the pursuit of a higher degree. Sources for funding can be accessed through an online fellowship database located on the office webpage at www.whittier.edu/career. Job search assistance includes providing referrals for on campus work-study positions; off-campus part- and full-time job listings; workshops on résumé writing, interviewing skills, job search strategies; on-campus interviews and an annual Career and Internship Fair. The Career Planning Office's web page www.whittier.edu/career contains helpful information and links for career exploration, graduate school, internships, summer jobs, full-time positions, conducting a job search, and much more.

## CENTER FOR ADVISING AND ACADEMIC SUCCESS (CAAS)

The mission of the Center for Advising and Academic Success (CAAS) is to empower all Whittier College students to become successful, self-directed, and collaborative lifelong learners. CAAS will provide a supportive and holistic learning environment for anyone who is willing to seek help and work towards achieving their educational and personal goals. CAAS services are free to Whittier College students and include: (1) academic advising \& guidance, (2) peer tutoring, (3) supplemental instruction, (4) peer academic coaching, 5) INTD 70: Whittier Seminar (6) academic strategies workshops, (7) computer lab, and (8) comfortable study space. Please call (562) 907-4816, visit our website, or stop by the Center for more information. CAAS is located on the ground floor of the library.

## COUNSELING SERVICES

Counseling Services provide the opportunity for students to discuss personal, emotional, and academic problems with a counselor in a safe, confidential environment. Under the direction of a licensed clinical psychologist, services are provided by psychologists, psychology interns in training, or postdoctoral associates. Services are free to currently enrolled undergraduate students and include short-term, problem-focused individual counseling and programs on many aspects of campus life. There is also a small library of books, tapes, and articles that can be borrowed. Staff members are prepared to provide referrals to students who need resources not offered by the counseling service.

## THE CULTURAL CENTER

The Cultural Center, located in the Campus Center next to the bookstore, seeks to create opportunities for cultural exchange and dialogue that foster mutual respect for the uniqueness of each member of the campus community. By sponsoring various programs and events, the Cultural Center promotes awareness, learning, critical thinking, identity development, and advocacy. In addition, the Center serves as a liaison to connect underrepresented populations of students to academic services, career counseling, and support networks that foster student persistence and success. The Cultural Center is a great place to meet other students and enjoy the rich diversity Whittier College has to offer. Housed within the Cultural Center are Interfaith Programs and the Ortiz Programs.
Interfaith Programs seeks to cultivate a campus-wide commitment to religious awareness, acceptance, and discourse. It does so by connecting people of diverse faith traditions for dialogue, collaboration, and service through sponsored activities, events, and programs that empower the campus community to explore religion, faith, and spirituality, The center also provides religious and spiritual student groups with the support they need to pursue their respective missions and goals.
The Ortiz Programs, formerly coordinated through the Center for Mexican American Affairs, were founded by Martin Ortiz '48 to enhance the college experience of Latino students. The Ortiz programs continue to provide academic, social, career, and financial aid guidance to all Latino students on campus, and in particular to those who are the first in their families to attend college. The Ortiz Programs also serve as a liaison between students, faculty, parents, alumni, and
community organizations. As a Hispanic-Serving Institution (HSI) Whittier College is proud to recruit and graduate a large percentage of Hispanic students. This commitment has contributed to Whittier's distinction as one of the country's most diverse liberal arts colleges.

## DISABILITY SERVICES

Purpose and Mission: Disability Services is committed to ensuring equal treatment, educational opportunity, academic freedom, and human dignity for students with learning, physical, and psychological disabilities. Disability Services is committed to providing reasonable and appropriate accommodations to students with disabilities, assisting students with disabilities in self-advocacy, providing academic support and counseling, educating the Whittier College community about disabilities and services provided, and by ensuring legal compliance with state and federal disability laws.

Disability Services is dedicated to providing students with disabilities access to the programs, services, and activities of the university as required by the Americans with Disabilities Act (1990) and by Section 504 of the Rehabilitation Act (1973). Section 504 states: "No otherwise qualified individual shall, solely by reason of his or her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

Who Qualifies for Services and Student Expectations? Any student with a documented physical/health, learning disability, emotional/psychological condition can make an appointment to see the Director. If you have any condition that substantially impacts/limits academic functioning please come in and make an appointment. The student must submit documentation according to Whittier College's documentation guidelines. Please visit our website or call us for more details. Students are expected to self-identify to the Director of the Disability Services office.

Receiving Accommodations and Services: After the student submits appropriate documentation to Disability Services, the Director will determine eligibility to receive services. Types of services provided are based upon the functional limitations of each student's condition.

## For students with Asperger's, ADHD, and Psychological/Emotional Conditions

Supportive Education Services (SES): Non-clinical Counseling, Case management, and Advising are available.

## HEALTH SERVICES

The Health Center provides treatment for common illnesses and minor injuries, immunizations, and women's health exams. The center also provides health education, illness prevention information, referral to local medical services when needs cannot be addressed on campus, and a variety of other services. The Center's Nurse/Director is available from 8:00 a.m. - 4:00 p.m. Monday through Friday. The doctor is on duty at various times during the week. There is no charge for a visit; however, there is a small charge for medications and lab tests. After
hours or emergency medical attention is available through Whittier Presbyterian Intercommunity Hospital or Bright Medical Associates Urgent Care.
All full-time students must be covered by health insurance while attending Whittier College. Students who are not covered by a personal or family policy are required to participate in a Student Health and Accident Insurance Program provided by the College for a fee.

## INTERNSHIPS \& COMMUNITY-BASED LEARNING

The mission of Whittier College Internships \& Community-Based Learning is to foster the effective use of experience as an integral part of a liberal arts education, in order to empower students and prepare them for professional lives upon graduation. Internships are academically-related, experiential learning opportunities that allow students to test themselves and learn from professionals in the field. Internships are available in business and industry, government, and non-profit community organizations. The Office of Internships \& Community-Based Learning assists students in all disciplines and at all academic levels who seek internship and community-based, service-oriented learning.
Services for students include: individual appointments with the staff to discuss your experience goals; the Early Email Alert list so that you can be notified of new internship/community-based opportunities just as soon as they are posted; 24/7 internship/community-based learning database access; assistance with your internship resume and cover letters; how to create your own intern position; strategies for finding summer positions when you are out of the Whittier area; and how to earn academic credit for your internship work; and internship/communitybased learning fairs and campus events during the academic year. The Office of Internships \& Community-Based Learning is located in the Campus Center on the second level.

## THE LEAP OFFICE

The Leadership, Experience and Programs Office works closely with the student government and officers of various clubs and organizations to promote and encourage co-curricular activities that meet the interests of the student body. Numerous student organizations initiate a variety of programs with the financial support of the student activity fee. The Leadership, Experience and Programs Office also advises programming in Club 88, our on-campus nightclub and performance venue. Comprehensive information about opportunities for leadership and involvement at Whittier College through societies, publications, broadcasting, clubs and organizations is available in the Student Handbook, on the College website and through the Leadership, Experience and Programs Office.

## RESIDENTIAL LIFE

Most Whittier College students live in one of eight campus residence halls. Residence halls accommodate from 20-210 students. They are staffed by full-time professional Area Coordinators and undergraduate Resident Advisors who provide students with continuous support, assistance, and program opportunities for learning and development.

Whittier College is committed to providing a co-curricular environment which enhances and enriches the academic program and which provides students with opportunities for personal and social growth, self-discovery, and an appreciation of one's responsibilities to self and others. To those ends, Whittier College sees residential living as an integral part of the student's education. Residential living fosters a sense of community, facilitates the integration of the individual into campus activities and organizations, exposes students in a very direct and personal way to a pluralist community, encourages an atmosphere of free and wide-ranging expression of ideas, and develops in each person capacities for self-direction and deep concern for others.
For these reasons, all Whittier College students are required to live on campus through their junior year unless they reside with their parents or legal guardians within a twenty-five mile radius of the College, are twenty-two years of age or older, or are married. It is the goal of Residential Life to expose as many students as possible to the benefits of living and learning at Whittier College. Residential students are additionally required to subscribe to one of the meal plans offered through the Campus Inn.

In addition to the variety of social and educational programs offered by the Residential Life staff, each residence hall is also affiliated with a Faculty Master House. This out-of-the-classroom living and learning opportunity creates a learning environment unmatched on the West Coast. The Faculty Master House tradition at Whittier College is modeled after those established at Oxford and Cambridge universities. It is designed to extend the classroom learning experience to all aspects of students' lives. Educational and social programs including such events as scholarly lectures, dinners, musical performances, and cooking classes are hosted by the faculty members in their homes. To enrich student experience at Whittier College, faculty masters also frequently sponsor trips to museums, galleries, theaters, and concerts in Southern California.

## STUDENTS RIGHTS AND RESPONSIBILITIES

A student enrolled at Whittier College assumes an obligation to conduct himself or herself in a manner compatible with the College's function as an educational institution. While the College believes in the ability of all Whittier College students to uphold the highest standards of behavior that is consistent with membership in an academic community, it does have jurisdiction over student conduct that is considered harmful or unacceptable.
The Code of Students' Rights and Responsibilities, created jointly by faculty, students, and administrators, is published annually in the student handbook and describes the principles and procedures employed at Whittier College. All members of the Whittier College community are expected to uphold and protect the values of the College.

## ACADEMIC HONESTY

When we engage in scholarship, we seek answers to questions we care about; we learn from others' work, and we add our contributions to a growing body of knowledge. However, we cannot honestly value that knowledge unless we also value truth. Acts of academic dishonesty are lies. They degrade our shared search for understanding as a community of scholars, and they undermine the integrity of that community by injecting falsehood into our dialogue. As a historically Quaker college, Whittier honors the Friends' testimonies of truth, community, and equality, where equality reflects our conviction that we are all worthy of equal respect. Thus, when members of our community commit acts of academic dishonesty, they are not committing victimless crimes. By violating - even in secret - the respect which they owe their colleagues, they tear the fabric of our community. Further, by shrinking from the self-defining work of scholarship, they hurt themselves.

## General Policy on Academic Honesty

Because the preservation of academic honesty is as fundamental to our shared enterprise as the transmission of knowledge, the faculty and administration of the College regard educating students in academic integrity to be as important as inspiring them to rise to the challenge of learning. Students are expected to produce independent work and to cite sources of information and concepts. When these principles are breached and a student misrepresents his or her level of knowledge, the basic framework of scholarship is broken. In these instances, students will be held accountable and will face sanctions that range from a warning to expulsion from the College. Ignorance of what constitutes plagiarism or cheating is not a valid defense. If students are uncertain of policies, they should consult the instructor for clarification. Adherence to the policies delineated below reflects the commitment of our community to a single standard of truth, a standard binding on students, faculty, and administrators alike.

## Definitions

These definitions do not represent a complete list of possible infractions; rather, they are intended to generally reveal the range of conduct which violates academic honesty.

1. plagiarism - Submitted work should be one's own work and it should properly acknowledge ideas and words from others: ideas from another source should be cited in both the body and the works cited section of the paper, and exact words from another source should be placed within quotes. Plagiarism is submitting work done by others as your own work, and it is the failure to properly and appropriately reference and acknowledge the ideas and words of others. This can include submitting an entire paper downloaded from a website or another source, copying and pasting parts of different papers to form your own paper, failure to put quotes around exact wording used from another source, and failure to appropriately reference ideas from another person. Citation guidelines
can be found in any writing handbook. While incorrect citation format may not necessarily be defined as plagiarism, individual instructors may penalize students for using an incorrect citation format. Please be aware that different disciplines use different forms for citing work. While each department should make these citation styles available, one is ultimately responsible for finding out this information. Students will be instructed on when and how to appropriately cite other people's work in their own papers in the College Writing Seminar and in the Writing Intensive Courses. Departments are also strongly encouraged to instruct students on appropriate citation in their introductory courses;
2. cheating -Honesty involves presenting one's own level of knowledge as accurately as possible. Misrepresentation of one's knowledge is considered cheating; examples include copying or sharing exam answers, presenting work done by others as one's own, changing in any way work which may be reviewed in response to a grade consideration request, having a falsely identified person take an exam, or using notes, books and the like in closed-book examinations;
3. misrepresentation of experience, ability, or effort - One is expected to accurately and fairly present one's experience, ability, or effort for any purpose. Providing false information concerning academic achievement or background in an area of study is academically dishonest. Examples include falsely reporting the substance of an internship, falsely representing the content of prior coursework, or falsely representing effort on a group project;
4. unauthorized collaboration - In many course activities, other than examinations, collaboration is permitted and encouraged. Course syllabi and in-class instructions will usually identify situations where collaboration is permitted, but the student shares responsibility for ascertaining whether collaboration is permitted. Collaboration on homework, take-home exams, or other assignments which the instructor has designated as "independent work" will be considered academically dishonest;
5. submission of same work in two courses without explicit permission to do so - Presenting all or part of work done for one course in another course requires permission of the instructors of the involved courses. Connected or paired courses may require submission of the same work in the two associated courses; this will be explicitly stated for this type of assignment. Failure to gain permission from the instructors in submitting the same work will be considered academically dishonest;
6. falsification of records - Records document a person's past accomplishments and give one measure of assessing those accomplishments. Any attempt to change grades or written records pertaining to assessment of a student's academic achievement will be considered academically dishonest;
7. sabotage - Valuing community means that one should respect another person's work and efforts. Destruction of or deliberate inhibition of progress of another person's work related to a course is considered academically dishonest. This includes the destruction or hiding of shared resources such as library materials and computer software and hardware to tampering with another person's laboratory experiments;
8. complicity concerning any of the above - Valuing community also means that one is honest with respect to another person's work as well as with one's own work. Any act which facilitates or encourages academic dishonesty by another person is itself an act of academic dishonesty.

## Sanctions

Various sanctions exist which may be applied in response to an act of academic dishonesty. The severity of sanctions will correlate to the severity of the offense. Judgment of the severity of an academic dishonesty offense is the responsibility of the faculty member. The faculty member is encouraged to seek counsel of faculty colleagues, the Associate Dean for Academic Affairs and/or the Dean of Students in gaining perspective concerning the severity of the offense.
All grade related sanctions shall be levied by the faculty member teaching the course within which the offense occurred. The Associate Dean of the Faculty and the Dean of Students are available to provide guidance concerning appropriate sanctions. In addition, the following are some recommended sanctions for various degrees of academically dishonest acts.
Violations: Examples may include plagiarizing anywhere from one sentence to one paragraph in a paper, submission of the same work in two classes without the instructor's permission, and unauthorized collaboration on a minor assignment.
Recommended range of sanctions: Reduction in letter grade for the assignment up to a failing grade on the assignment. Repeated violations in the same course may result in a failing grade for the course.
Flagrant Violations: Examples may include plagiarizing an entire paper or most of a paper, cheating on a quiz or exam, and unauthorized collaboration on a major assignment.
Recommended range of sanctions: Failing grade on the assignment up to a failing grade in the course.

Faculty members who wish to apply sanctions other than the recommended range of sanctions listed above, must explicitly state this in their syllabus for a course.

## The Process

Faculty members must provide the student with a written account of the offense and the sanction. Faculty members must also report cases of academic dishonesty to the Office of the Dean of Students, including a brief written account of the offense and the sanction levied through an on-line form, and a copy of the plagiarized paper. The Dean of Students must take a student to the Hearing Board if the student has a minimum of two flagrant violations or three total violations. The Dean of Students has the discretion to take students to the Hearing Board for fewer
violations if there are other outstanding circumstances. Also, the Dean of Students must communicate with involved faculty members if a student is scheduled to appear before the Hearing Board.
The Hearing Board considers whether any further action should be taken which may include suspension or expulsion from the college. The Hearing Board does not reconsider the grade sanction given by the faculty member earlier in the process, but rather considers whether additional sanctions are merited. The Board will consider the entire student record of misconduct when making its decision and it will not limit itself just to acts of academic dishonesty.

## ACADEMIC PETITIONS POLICY AND PROCESS

The Petitions Committee, composed of faculty and the Registrar, reviews and makes decisions on student petitions for waivers of admissions requirements, specific graduation requirements as outlined in the College catalog, or other academic requirements. The committee normally grants such waivers only in the presence of strong and sufficient evidence supplied by the student. The Committee considers petitions on an individual basis and does not grant blanket waivers of graduation or other requirements. Ignorance of College requirements and/or financial hardship are not sufficient reasons for the granting of a petition.
The procedure for filing a petition is as follows:

1. The Student discusses a petition request with his or her faculty advisor, the Registrar, or the Associate Dean of Faculty.
2. The Student fills out the petition form as completely as possible, paying particular attention to "Petition Request" and "Rationale for Request."
3. The Student reviews the petition with his or her faculty advisor and has it signed by the advisor. If necessary, the advisor provides additional comments.
4. The Student returns the petition and any supporting materials that may assist the committee in the evaluation of the request to the Registrar's Office.
5. The Petitions Committee reviews the request and provides a written response to the petition.
6. Students may appeal Committee decision. The procedure for appeal is as follows:
a. The Student reviews the Committee's decision with the faculty chair of the Petitions Committee (the name of the chair can be obtained from the Registrar's Office).
b. The Student reviews with the faculty advisor the decision of the Committee and the explanation given by the chair of the committee. Before an appointment to appeal the decision is made, the student should be sure to discuss any new and relevant arguments or materials that might persuade the Committee to reevaluate the original request.
c. The Student makes an appointment, through the Registrar's Office, with the Petitions Committee. All appeals must be made in person before the Committee. Students are entitled to bring an advisor to the meeting. Most students bring their faculty advisor, but any member of the faculty may accompany a student to the appeal.

## ACADEMIC PROGRESS POLICY

Whittier College students are expected to make continuous progress toward their educational goals. In order to monitor student progress, a faculty committee reviews all academic records after the end of each semester. Students who have received any grades of non-completion have their records placed in an advisement file. Students who have encountered more serious academic problems are advised to seek assistance from their faculty advisor, and the Office of Student Life.

Continuing academic problems may result in academic probation with restrictions on enrollment and extracurricular activities. Students who do not meet the obligations of probation or who cease to make satisfactory progress may not be permitted to register for one or more semesters.
The chart below summarizes each current academic standing and the resulting standing based on the term and Cumulative GPA's achieved in a given term:

| If your current <br> Academic <br> Standing is: | And you received <br> a TERM GPA of: | And you received <br> a CUM GPA of: | Your next <br> Acacemic <br> Standing will be: |
| :--- | :--- | :--- | :--- |
| Good Standing | Above 2.0 | Above 2.0 | Good Standing |
| Good Standing | Below 2.0 | Above 2.0 | Warning |
| Good Standing or <br> Warning | Below 2.0 | Below 2.0 | Partial Probation |
| Partial Probation | Above 2.0 | Above 2.0 | Good Standing |
| Partial Probation | Above 2.0 | Below 2.0 | Continued on <br> Partial Probation |
| Partial Probation | Below 2.0 | Below 2.0 | Full Probation |
| Full Probation | Above 2.0 | Above 2.0 | Good Standing |
| Full Probation | Above 2.0 | Below 2.0 | Continued on Full <br> Probation |
| Full Probation | Below 2.0 | Below 2.0 | Suspension |

## ACADEMIC REVIEW

## A. Good Standing

For any given term students are considered in Good Standing when their cumulative and semester grade point averages are both 2.0 or above.

## B. Academic Warning

1. For any given term students will be placed on Academic Warning when their semester grade point average is below 2.0 and their cumulative GPA is above 2.00.
2. Students placed on Academic Warning will receive a letter of notification from the Office of the Associate Dean of Faculty.
3. It is recommended that students on Academic Warning participate in the Academic Recovery Program through the Center for Advising and Academic Success. See Section F.
4. Students on Academic Warning will return to Good Standing if their cumulative and semester grade point average are both above 2.0.

## C. Partial Probation

1. When a student on Academic Warning or in Good Standing, receives a cumulative and semester grade point average below 2.0.
2. Students placed on Partial Probation will receive a letter of notification from the Office of the Associate Dean of Faculty.
3. Students on Partial Probation are not restricted from participating in any activities except that they may not join a society.
4. First-Year students on Partial Probation are required to participate in the Academic Recovery Program through the Center for Advising and Academic Sucess. It is strongly recommended that other students on Partial Probation participate in the program. See section F.
5. When students on Partial Probation receive a semester grade point average above 2.0, but their cumulative grade point average is below 2.0, they will be continued on Partial Probation.
6. When students on Partial Probation receive a cumulative and semester grade point average above 2.00, they will return to Good Standing.
D. Full Probation
7. Students on Partial Probation, who again receive a cumulative and semester grade point average below 2.0, will be placed on Full Probation.
8. Students placed on Full Probation will receive a letter of notification from the Office of the Associate Dean of Faculty.
9. Students on Full Probation may not hold any office in student government, the residence halls, or a society, or participate in athletics, club sports, drama or music productions, the yearbook, the Quaker Campus, or any other student organization unless required to do so for graduation. Other conditions may be attached to Full Probation by the Academic Review Committee on an individual basis.
10. Students on Full Probation are required to participate in the Academic Recovery Program through the Center for Advising and Academic Sucess. See section F.
11. When students on Full Probation receive a semester grade point average above 2.0, but their cumulative grade point average is below 2.0, they will be continued on Full Probation.
12. When students on Full Probation receive a cumulative and semester grade point average above 2.0, they will return to Good Standing.

## E. Suspension.

Students on Full Probation who earn a cumulative and semester grade point average below 2.0 will be suspended for at least one semester.

## F. Academic Recovery Program.

First-year students on Partial Probation and all students on Full Probation will be required to participate in an Academic Recovery Program through the Center for Advising and Academic Sucess. Students who receive a warning or partial probation and who are not required to use Academic Recovery can also informally use the Program by going to see the Associate Dean of First Year Programs and Advising or the Director of the Center for Advising and Academic Sucess. Students who are required to participate in academic recovery must sign an educational contract which may include going to CAAS to seek academic assistance, meeting with their advisor or mentor on a regularly scheduled basis, using other college resources, and/or reducing their course load to no more than 12 credits. Each plan will be developed based on the needs of the individual student. If a student does not meet the requirements of the academic contract they may be suspended or return to full probation the next semester, based on the decisions of the Academic Review Committee.

## G. Academic Review Committee.

Students who wish to appeal the conditions that pertain to their level of academic difficulty (Full Probation or Suspension) may complete an appeal in writing with the Academic Review Committee. This committee, comprised of faculty and administration, meets prior to the onset of the fall and spring semesters.
H. Guidelines for appealing Suspensions through the Academic Review Committee.
The following guidelines may be applied by the Academic Review Committee as it deems appropriate:

1. Appeals of academic suspension or change in probation status include documentation of the following:
a. A plan from the student analyzing his/her academic load, work commitments, and any other factors that might have contributed to poor performance, and what steps the student has taken and will take in the future to correct the situation;
b. A letter of support from the student's academic advisor or program
director indicating a plan for restoration to satisfactory academic standing;
c. Supporting documents from qualified professionals for students who have experienced medical difficulties or other unusual circumstances;
d. For students who do not meet criteria in H but have spent time away from Whittier College since suspension, official transcripts of work completed during that time must be forwarded to the Academic Review Committee. Students may include letters of support from persons qualified to assess their ability to return to academic work.
2. Students may only appeal their suspension if they meet the following criteria:
a. Must not have an outstanding tuition balance with the institution (Approval of the Business Office).
b. Students receiving financial aid must show that they meet Satisfactory Academic Progress (SAP) to continue to receive aid if their petition is granted (Approval of Financial Aid).
c. Must not have any outstanding disciplinary/honor code violations (Approval of the Dean of Students).
d. Fulfilled their educational contract if they participated in an Academic Recovery program the prior semester (Approval of the Associate Dean of First Year Programs and Advising).
3. In considering suspensions, some consideration may be given to the total number of units earned toward graduation.
4. Students may appeal Committee decisions to the Associate Dean of Faculty.
5. Students finishing Incompletes successfully may have the severity of the sanction reduced.
6. Incompletes, W's, CR's, and Evaluations will not be used in calculating grade point averages.
7. The Academic Review Committee may ask to meet with the student if they deem necessary. Otherwise decisions are based on the written appeal.
8. If a student successfully appeals their suspension, they will be re-admitted on Full Probation.
a. A student readmitted on Full Probation is readmitted under the same restrictions as all other students on Full Probation. See Section D.
b. Additional conditions may be attached to the probation (educational contract).

## H. Guidelines for Readmission after Suspension without petitioning the Academic Standing Committee.

Previously suspended students can apply for readmission through the Office of the Registrar by meeting the following criteria:

1. Successfully complete minimum of six transferrable units at another institution with a minimum grade point average of 3.0 in those courses.
2. Must not have an outstanding tuition balance with the institution (Approval of the Business Office).
3. Students receiving financial aid must show that they meet Satisfactory Academic Progress (SAP) to continue to receive aid if their petition is granted (Approval of Financial Aid).
4. Must not have any outstanding disciplinary/honor code violations (Approval of the Dean of Students).
5. If students successfully appeal their suspension, they will be Readmitted on Full Probation.
a. A student Readmitted on Full Probation is readmitted under the same restrictions as all other students on Full Probation. See Section D.
b. Additional conditions may be attached to the probation (educational contract).

## ATTENDANCE POLICY

Individual faculty members establish their own attendance policies for each course they teach. Students are advised to check with faculty members about the attendance policies for each class (Also see Withdrawal Policy). Faculty may, through the end of the fifth school day for semester classes, drop students who have never attended class.

## AUDITING

Lecture and recitation courses may be audited without credit with the consent of the instructor. The normal audit fee is assessed. Courses such as laboratory or studio work may be audited, but regular tuition and fee charges apply. A student auditing any course takes no examinations and receives no grade or credit.

## CLASS STANDING

The total number of units earned, including those accepted from other colleges or universities, determines classification of undergraduate students. Classification is established as follows:

| Freshman | $0-29$ | semester credits |
| :--- | :---: | :--- |
| Sophomore | $30-59$ | semester credits |
| Junior | $60-89$ | semester credits |
| Senior | $90+$ | semester credits |

## COMMENCEMENT

The College conducts one Commencement each year in late May. However, the date of the degree noted on the student's permanent record is the last day of the term during which degree requirements were completed.

Commencement at Whittier College is a very special event. The faculty are proud of the College's graduates and, as such, attendance at Commencement is a College requirement if clearance from the Business Office has been secured. Students may be excused only by approval from the Office of the Registrar.
In order to be listed in the Commencement program and to participate in the graduation ceremonies, all graduation requirements must be satisfied before Commencement. To be eligible as a summer graduate and participate in Commencement, a student must register and pay (or make suitable arrangements with the Business Office) for the courses needed in the summer at least three weeks prior to Commencement.

## CONCURRENT ENROLLMENT POLICY

The purpose of concurrent enrollment is to allow currently enrolled students to take approved courses at other institutions and not lose their current enrollment status at Whittier College. A student must obtain a Concurrent Enrollment Form from the Office of the Registrar and have prior approval for all courses taken at another institution. Concurrent enrollment courses may not be used for the Liberal Education requirements. A student may not register for credit at Whittier College and elsewhere simultaneously without advance permission from the Registrar. Credit will not be guaranteed unless the Concurrent Enrollment Form is filed and approved prior to enrollment at the other institution. Credit will be awarded after an official transcript has been received and evaluated by the Office of the Registrar. Actual grades from other institutions will not transfer to Whittier College; only the credits will transfer. A student may not receive credit for courses taken at a community college after completing 70 units of college work.

## CREDIT BY EXAMINATION

College credit totaling a maximum of 30 semester hours may be earned by satisfactorily completing approved examinations. Acceptable examinations include College Entrance Board Advanced Placement Tests and International Baccalaureate Higher Level Examinations. No more than eight units may be awarded from a single department.

Entering students who have passed Advanced Placement Tests with a score of four or five will receive credit toward graduation if the tests are in subject areas taught at Whittier and the academic department approves. The Registrar's Office can provide information on specific departmental policies on numbers of credits awarded and course equivalencies.
Entering students who have passed International Baccalaureate Higher Level Examinations with a score of five or above will receive credit toward graduation on a case-by-case basis with the approval of the academic department.

## DEAN'S LIST

An undergraduate student will be awarded Dean's List honors if he/she earns a 3.70 GPA while completing 12 gradable units (letter grades of A through F) in the Fall or Spring terms. No Dean's List honors will be awarded for Summer or January terms.

## DECLARATION/CHANGE OF MAJOR POLICY

Upon admission, first year students' major will be designated as "undecided". A first-year student is not precluded from choosing a major during the first year, in fact they can choose a major as early as orientation, however, a major must be chosen by the end of the second semester of their second year.

## Declaration/Change of Major Procedures

1. Students must choose a major by the end of their sophomore year. Students will be notified in the fall semester of the second year if they have not yet chosen a major. They will be given written notification of the policy and a declaration form. They will be asked to work with their mentor (and the Advising Center and the Career Center) in developing an educational plan for completion of their degree.
2. When declaring a major students must submit the declaration form to the Registrar's Office-- to officially change the major.
3. Included on the Declaration of the Major form is an area to change the advisor; sophomores will be required to change their advisor by completing that section. If you are keeping your mentor on as your advisor, you must still fill out that section.
4. If students do not change their advisor at the time they submit the Declaration of Major form, the Registrar's Office along with the Major Department will assign the student an advisor in the new major.
5. Students who have not completed their declaration of major by registration during the spring of their sophomore year will receive a hold on their registration. They will not be allowed to register for junior year course until the Declaration of Major form is filed with the Office of the Registrar.

## DIRECTED STUDY

Directed Study is a special arrangement whereby a student takes a course listed in the catalog in a special tutorial arrangement with a faculty member. Directed Study requires permission of the faculty member and the student's advisor and operates under the following guidelines:

1. The student will have completed all prerequisites for the course prior to commencing the directed study.
2. Directed Studies are only allowed in courses listed in the current catalog. If the substance of the course is not that of any course listed in the catalog, the student should pursue an Independent Study.
3. Directed Studies are not to be used to make up a required course simply because the student found it inconvenient to take the course when offered. The student must provide an acceptable rationale for why the course was
not taken, or can not be taken, when offered in the normal class schedule.
4. The student may take only one Directed or Independent Study in a given semester.
5. A Directed Study is offered at the discretion of the faculty member who will be supervising the tutorial.
6. Students must have completed 30 units of credit and be in good academic standing, demonstrating the ability to engage in self-directed study under the guidance of a faculty member.

## DISTINCTION IN THE MAJOR

The Whittier College faculty believes that students who have achieved excellence in their majors should receive recognition at graduation. Because this is an award for academic achievement, rather than service, the criterion will be either a superior grade point average in the major ( 3.5 minimum, at the discretion of the department) or other extraordinary academic achievement (published or publishable papers, presentation at a conference, significant research or creative project). The GPA will be based on seven semesters, including the first semester of the senior year. For transfer students, at least $50 \%$ of the units required for the major should reflect work done at Whittier College, or in programs under the auspices of the College, in order to be considered for the award. In addition to recognition in the graduation program, the student's achievement will be noted on the transcript.

## EMAIL (CAMPUS EMAIL ACCOUNTS)

All Whittier College students are assigned an individual Whittier email address and have access to the My.Whittier.edu web portal system. The My.Whittier system provides personalized information and services to members of the college community. Through My.Whittier, students can securely access resources such as e-mail, news and event information, personal information, academic records, student account, financial aid, and other student business information.
All students are assigned an individual email address which consists of their username followed by @poets.whittier.edu. College information and official college communications are sent to this email address. My.Whittier's e-mail is an official means of communication through which students may contact the college and the college may contact students. My.Whittier can be found at http://my.whittier.edu.
Along with other forms of campus communications, such as campus mail, students are responsible for receiving, reading, complying with, and responding to official email communications from the college.

## FAMILY EDUCATION RIGHTS AND PRIVACY ACT (FERPA)

The purpose of the Family Educational Rights and Privacy Act of 1974 is to assure students at Whittier College access to any and all records kept by Whittier College that are defined as educational records and to assure the privacy of students by restricting the disclosure of information from educational records only to those persons authorized under the Act. Procedures and policies for access to specific records may be obtained from the appropriate office.

Information from educational records is not available to unauthorized persons on campus, or to any person off campus without the express written consent of the student involved, except under legal compulsion (e.g. subpoena, warrant), or in cases where the safety of persons or property is involved. In compliance with judicial order or subpoena, an attempt must be made in advance to notify the student. A signed consent from the student must be presented, where appropriate, to the Dean of Students, the Registrar, or other appropriate college officials, before information will be released to those persons who are not institutional authorities specifically authorized to inspect these files.
Students in attendance at Whittier College, and parents of such a student with prior written consent of the student, have access to any and all education records maintained by Whittier College, including the right of obtaining copies by paying copy fees.
The College will not disclose personally identifiable information from the educational records of a student without the prior written consent of the student, with some exceptions, except information that has been designated as directory information: the student's name, id number (not Social Security Number) address, telephone number, e-mail address, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student.
Whittier College will give annual public notice as to the information designated as directory information. The student has the right to prohibit the designation of any or all of the categories of personally identifiable information with respect to that student, provided that said student notifies the Office of the Registrar in writing that such personally identifiable information is not to be designated as directory information with respect to that student. Notification must be made to the Office of the Registrar within three days after the student registers each semester.

## FINAL EXAMINATION POLICY

It is the policy of Whittier College that all final examinations are to be given only at the officially scheduled time for the course as published on the Registrar's web-site. In addition, no take-home final examinations or papers assigned in lieu of a final examination will be due prior to the scheduled time of the final examinations.

## GRADE APPEAL POLICY AND PROCESS

The faculty of Whittier College believes that grading is the responsibility and prerogative of individual faculty members according to their professional judgments of students' performance, and that this responsibility and prerogative should be safeguarded. Nevertheless, the faculty also recognizes the need to safeguard students of Whittier College against possible bias or lack of uniformity in the evaluation process, and thus has provided a mechanism to address this concern.
The maximum time allowed for filing a grade appeal with the Associate Dean of Faculty, whether the student is enrolled or not, is one year from the date the grade was awarded.

This mechanism will be used only in cases where strong and demonstrable evidence of bias or lack of uniformity in assigning grades to members of a class exists, and only after all other avenues of appeal have failed to resolve this question.
I. The process to be observed prior to utilizing the grade appeal petition is as follows:

1. The student will discuss a disputed grade for a course with the faculty member in person, in an attempt to resolve the differences over the grade. If no agreement is reached, then
2. The student will consult with the chair of the department in which this faculty member is teaching. If the question is still unresolved, or in the event that the teacher giving the disputed grade is also the department chair, then
3. The student will refer the question to the Registrar. The Registrar will inquire into the matter and attempt to bring about an amicable solution. If no agreement can be reached, and the Registrar decides that the matter requires further attention, then
4. The Registrar will direct the student to complete a Grade Appeal Petition, which will be forwarded to the Grade Appeals Committee, composed of the Associate Dean of Faculty, the Chair of the Academic Standing Committee, and one faculty member, appointed by the Faculty Executive Council.

## II. THE GRADE APPEALS COMMITTEE

The Committee will investigate the underlying facts of an appeal, which may include interviewing the student, faculty member, and any other persons whom the committee feels might be able to help it clarify the matter. If, in the course of this process, an amicable resolution of the difference can be affected, the Committee's consideration of the matter will end.

If, after making a full inquiry into the matter, no resolution is reached, the Committee will decide the outcome of the grade appeal. Possible decisions may include leaving the grade as it is, changing the grade to correct demonstrated evidence of bias or lack of uniformity in grading, or working out other possible solutions as the Committee sees fit. No grade may be changed unless the Committee reaches consensus on the proposed change.
Academic policies and procedures for post-baccalaureate and graduate students may differ from those cited above for undergraduates. Please see the document, Academic Policies and Procedures for Graduate Programs and Programs in Education, available in the Education Department, for details.

## Grade Definitions

A Excellent Generally reserved for the very highest level of academic work.
B Good Meeting course requirements with a high level of performance.
C Satisfactory Awarded for satisfactory completion of all or most of the course requirements.
D Passing Awarded for barely meeting the minimum standards of the course.
F Failing Not meeting the minimum standards of the course.

## Grading Philosophy

The members of the Whittier College faculty regard the evaluation of student performance as one of their most important responsibilities. They further believe that grading is a vital element in this evaluation in that it allows for the reporting of student progress to the students themselves, to the college for the purposes of advisement and for the awarding of honors upon graduation, and to the outside world, at the request of the student, for the applications to graduate school and for prospective employment.
The awarding of grades by the faculty reflects the quality of the students' performance as measured against the individual faculty member's expectations based upon objective criteria, including the nature of the discipline and the faculty member's experience in evaluating student performance within that discipline. Thus, grading will not always be uniform from course to course.

Moreover, the boundaries of academic freedom allow discretion on the part of individual faculty members in the awarding of grades. However, the faculty recognizes that grades must always be rigorously fair, and awarded on the basis of criteria that are explained to the students at the beginning of each course. The following points underscore the faculty's grading framework:
Course expectations and grading are the sole responsibility of the course instructor.
Grades are determined based on the students' mastery of the course materials and demonstration of the skills required.
The grading standards shall be appropriate to the academic level of the course and standards shall not be set either so high that no one can attain an 'A' nor so low that it is impossible to receive a grade of ' $F$.'
Students have the right to information about how they will be evaluated, so information about grading and grading standards should be contained in the course syllabus.

## GRADING POLICY

The academic standards of an institution are largely determined by the admissions policies of the institution and by the standards of work required by the faculty. Once awarded, a grade may not be changed as a result of reevaluation of work submitted by a student. The only justification for a change of a grade is to correct a clerical error on the part of the instructor. The submission of additional work by a student (except to remove an Incomplete resulting from illness or similar circumstances) is not justification for altering a grade, once it has been recorded.
Most courses at Whittier College are graded from A to F with the awarding of (+) or (-) grades at the discretion of the instructor; however, by the fourth week of the semester, and at the discretion of the instructor, the student may be given the choice of Credit/No Credit(CR/NC) or Letter of Evaluation. Freshman Writing Seminars cannot be taken for CR/NC.

The grade option cannot be changed after it has been submitted to the Registrar's Office. All letter grades, including D's, F's, NC's, and W's, will be recorded on the student's permanent transcript.

When an instructor is unable to submit his or her grades by the time all grades are to be posted, then the Registrar will assign NG (no grade reported) to each student. The grade will be treated as an Incomplete for all purposes of evaluation.
The three grading options are:

| Grade Option I | Grade Points | Grade Option II | Grade Option III |
| :--- | :--- | :--- | :--- |
| A | 4.00 |  |  |
| A- | 3.70 |  |  |
| B+ | 3.30 |  |  |
| B | 3.00 |  |  |
| B- | 2.70 |  |  |
| C+ | 2.30 | ER |  |
| C | 2.00 |  | Erades of D \& F in courses <br> taken for Credit/No Credit will <br> receive no credit. |
| C- | 1.70 | NC |  |
| D | 1.00 |  |  |
| F | 0.00 |  |  |
| W** |  |  |  |

* Evaluation grades do not guarantee a passing grade or credit.
** Withdrawal


## Graduate Standing

Those who have been granted baccalaureate degrees (or equivalent) from accredited colleges and universities are admitted for fifth-year work as graduate students if they have met the requirements for degree candidacy as determined by the Whittier College faculty.

## Honors At Commencement

Each year Whittier College grants academic honors to deserving seniors at Commencement. The determination is based on grades received throughout all undergraduate studies at Whittier College. Honors at Commencement are based on students' cumulative grade point averages. Students will receive the highest level of honors for which they are eligible. Those students with the following grade point averages will receive the corresponding Honors at commencement:

> 3.70-3.79: Cum Laude
3.80-3.89: Magna Cum Laude
3.90 and above: Summa Cum Laude

In order to graduate with academic honors, the student must have earned at least 60 credits at Whittier College. No less than two-thirds of the total credits earned must be letter grades.

## Incomplete Grades Policy

A grade of Incomplete may be issued to a student in a course for which the student has been unable to complete the requirements due to extenuating circumstances. The student must request a grade of "Incomplete" using the Application for Incomplete Grade form found on the Registrar's Forms web page. An incomplete may be assigned at the Instructor's discretion and only when exceptional circumstances, circumstances beyond the control of the student, have prevented the student from completing the final assigned work or examination. The instructor will note requirements to be completed on the application form. Incompletes may not be granted to students for improper time management, academic overload, or outside employment conflicts.
All requirements to satisfy the incomplete grade must be completed no later than 10 weeks following the last day of the term in which the incomplete is issued. Failure to complete the work within the time allotted will result in the student receiving a grade based upon the work completed prior to the incomplete. In many cases this will result in a Failure for the course.

## INDEPENDENT STUDY

Independent Study is a tutorial arrangement with a faculty member. Independent Study requires permission of the faculty member and operates under the following guidelines:

1. The student should have completed the basic courses offered by the department in which the work is to be done.
2. The substance of the study should not duplicate the work of any course listed in the catalog; however, students may petition to meet specific course requirements through Independent Study.
3. The student may take only one Independent Study in a given semester.
4. Independent Study courses may be arranged for one to three credits.
5. Independent Study is offered at the discretion of the faculty member who will be supervising the tutorial.
6. Students must have completed 30 units of credit and be in good academic standing, demonstrating the ability to engage in self-directed study under the guidance of a faculty member.

## IP IN-PROGRESS GRADES POLICY

Assigned when an educational experience (e.g., student teaching, internship, or practicum) is designed to extend beyond the traditional grading term, a grade of IP must be accompanied by a date at which a final grade is due. If a grade is not submitted to the Registrar by the specified date, a grade of "IN" will be assigned. Thereafter, the course is governed by the policy of "Incomplete Grades." A grade of IP cannot be assigned for a traditional course as a means to extend the grading period beyond the traditional term.

## NON-DEGREE STANDING

For those interested in academic pursuits outside of any degree requirements, "non-degree" standing is permissible on either a part-time or full-time basis with the approval of the Office of the Registrar. A non-degree student must satisfy the English proficiency requirement for degree candidates at the College. A student may transfer no more than 30 credits of courses taken at Whittier College under nondegree status toward a Whittier College Bachelor of Arts and no more than 12 nondegree credits toward the Master's degree at the College.

## READMISSION

Those students who have interrupted their studies at Whittier for a semester or more must apply for readmission through the Registrar's Office. Transcripts must be submitted from any other college(s) attended during the absence from Whittier. Readmitted students may begin classes at the beginning of the fall, January, or spring terms. If a student is away longer than six consecutive semesters or eight total semesters he/she returns under the graduation requirements in the college catalog in place at the time of the student's re-enrollment.

## REGISTRATION AND CLASS SCHEDULING

The Office of the Registrar is the principal source of information concerning registration procedures. Details are contained in the Schedule of Classes published each semester prior to registration for the upcoming semester.
Students must complete registration during the assigned period at the beginning of each term by paying tuition and fees and by filing the completed registration form with the Registrar. A new, re-admitted, or continuing student who did not preenroll must register during regular registration periods. No credit will be given for a course in which the student is not officially registered.

Flexibility for learning is built into daily and weekly class scheduling. 50-minute and 80-minute class periods are available throughout each week day. Frequency of weekly meetings varies, depending upon the credit value of the particular subject.

## REPEATED COURSEWORK POLICY

A course may be repeated, but degree credit will be given only once (except for courses designated in this catalog as "may be repeated for credit"). The grade assigned for each enrollment shall be permanently recorded on the student's transcript. A course originally taken for a letter grade may not be repeated on a CR/NC basis. In computing the GPA of a student repeating a course, only the most recently earned grade shall be used.

## ROTC

Although actual ROTC courses are not taught on the Whittier College campus, "cross-town" agreements with other institutions exist to allow qualified Whittier College students to participate in the Air Force Reserve Officers Training Corps (AFROTC) or the Army Reserve Officers Training Corps (AROTC).
ROTC is a program that is taken concurrently with a college student's normal academic studies and offers additional opportunities for leadership developmental and personal growth. Scholarships and financial aid are available through the ROTC programs for students who qualify.
Please contact the Army ROTC program at California State University, Fullerton, or the Air Force ROTC program at the University of Souther California for information regarding ROTC and any scholarship programs.
Upon the registrar's approval, academic credit earned in these programs may be counted as elective units toward fulfillment of Whittier College graduation requirements. Additional information is available at the Office of the Registrar.

## SPECIAL COURSE AND LABORATORY FEES POLICY

Some courses have expenses associated with them that are not covered by regular tuition and fees, and in such cases the College may charge additional fees in amounts approximately equal to the added instructional or laboratory costs. Special charges may be made according to current costs for the following:
A. Courses requiring equipment, facilities or materials not available on campus, for science and certain field courses.
B. Courses requiring use of high technology equipment, e.g., computer courses.
C. Private instruction in music and similar arts.
D. Courses requiring field trips or travel.
E. Noncredit courses, conferences, workshops, postgraduate seminars and similar educational offerings.

## STUDENT GRADE REPORT

A formal student grade report indicating academic achievement is issued for each term. Grade reports are available online to all students. Under special circumstances, and by special request only, printed grade reports may be sent to the student mail boxes at the end of the fall semester and the January Interim, and mailed to the student's permanent address at the end of the spring semester.

## STUDY LOAD

For undergraduate students, a minimum full-time study load is 12 credit hours per semester (one credit hour is equivalent to one semester hour). A normal course load for students planning to graduate in four years is 30 credits per year; this could be accomplished by taking 15 credits each semester or, in some years, by taking 13 credits each semester and a 4 -credit course during the January Interim. Credit hours taken in excess of 15 require additional tuition charges. An extra study load, more than 17 credit hours per semester, must be approved by the student's mentor or advisor and certified by the Registrar. Forms for an extra study load are available in the Registrar's.

## TRANSFER CREDIT POLICY

Whittier College accepts courses in transfer as long as the courses were completed at a regionally accredited institution. Whittier will not accept courses that earned a grade lower than a C-. A student may not receive credit for courses taken at a community college after completing 70 units of college work. A maximum of 70 credits may be transferred from a community college. A combined maximum of 90 credits from community colleges and four-year institutions can be transferred.

## TRANSCRIPT OF WHITTIER COLLEGE RECORD

A transcript of a student's academic record will be issued when the individual's written authorization is received. The Registrar's office accepts cash and checks in payment of the transcripts. Major credit cards may be used to order transcripts through the National Student Clearinghouse via the internet. Please see the Office of the registrar web page for more information.
Transcripts and diplomas will be withheld for any student who has outstanding financial obligations to the college.

## VETERAN'S BENEFITS

Whittier College is approved to train veterans under Title 38, Chapter 36, U.S. Code Sections 3671(a) and 3672(a). Eligible individuals must submit copies of their honorable discharge, VA eligibility and transcripts of all previous educational experiences for review. See the VA Coordinator in the Registrar's Office for further information.

## WITHDRAWAL POLICIES

## Dropping Classes

Students may drop a class without record of enrollment during the first three weeks of a semester course. Faculty may, through the end of the fifth school day for semester classes, drop students who have never attended class. (also see Attendance Policy).

## Withdrawing from Courses

Until the end of the sixth week of a semester course, students may withdraw from a course for any reason. A grade of "W" will be assigned. After this period, withdrawals will be allowed only for reasons of health or serious personal problems. Academic difficulties or lack of interest in the course are not sufficient reason for late withdrawals.

## Withdrawing from the College

A withdrawal is generally requested when a student does not plan to return to Whittier College or plans to transfer to another school. A leave of absence is granted to a student who plans to return to Whittier within one academic year. Students who plan to do either must apply through the Dean of Students' Office. Withdrawals will be recorded on the transcript as a W.

## Leave Of Absence

Students in good academic and financial standing may request a leave of absence. The leave of absence together with any additional leaves of absence must not exceed a total of 180 days in any twelve month period. If a leave of absence does not meet the conditions listed in the Code of Federal Regulations-34 CFR 668.22(d), the student will be considered to have withdrawn from school.

## Medical Leave of Absence During the Semester

- Students who have an emergency or medical illness during the semester must obtain the Withdrawal/Leave of Absence form from the Dean of Students Office.
- The student must make an appointment with the Dean of Students.
- Students must complete the form, date it and submit it to the Dean of Students Office.
- Faculty will be notified by the registrar's office and the student will receive a grade of "IN" in all courses.
- The student will be expected to complete all courses upon returning to active status.


## End of Semester Leave of Absence

- Students need to spend time away from Whittier College may request a Withdrawal/Leave of Absence form from the Dean of Students Office.
- The student should make an appointment with the Dean of Students or the Assistant Dean of First Year Experience (for freshmen) to discuss his/her plans.
- The student must complete the form, date it for the last day of the semester, and submit it to the Dean of Students Office.
Students who fail to notify the Dean of Students office of their leave of absence will not qualify for tuition cancellation of any kind. A student is not considered on leave until the student submits the completed and signed Withdrawal/Leave of Absence form to the Dean of Students.


## Medical Withdrawal During The Semester

- Students who have an emergency or medical illness during the semester must obtain the Withdrawal/Leave of Absence form from the Dean of Students Office.
- The student must make an appointment with the Dean of Students.
- Students must complete the form, date it and submit it to the Dean of Students Office.
- Faculty will be notified by the registrar's office and the student will receive a grade of "W" in all courses.
- The effective date on the form will be used to calculate tuition cancellations whenever applicable.
No withdrawals of any type will be granted during the last week of any course.


## THE CURRICULUM

## DEGREES

Undergraduate courses offered by Whittier College lead to the degree of Bachelor of Arts. Graduate instruction leads to the degree of Master of Arts.
The Bachelor of Arts degree at Whittier is built upon a pattern of general education requirements to develop breadth of knowledge and an understanding of the relationships among various disciplines. General education, known as the Liberal Education Program at Whittier, is complemented by a major, which may be in a single department or interdisciplinary program, and by electives, which offer students an opportunity to explore additional areas of academic interest. Within this basic structure, Whittier College's curriculum is flexible, to allow for the individual needs, academic interests, and goals of its students. Through the Whittier Scholars Program, the College encourages students with a desire to design their own curricula to do so, in close consultation with a Scholars' Council. Regardless of which curricular path or major a student chooses, Whittier College is committed to developing strong writing skills throughout the curriculum.

## THE LIBERAL EDUCATION PROGRAM

The Liberal Education Program provides an academic framework for collaboration and transformation within the community that is Whittier College. Through the Liberal Education Program, Whittier College prepares students to solve problems and communicate ideas in an increasingly complex and interdependent world community. It does this through its emphasis on cultural perspectives and the importance of connections between different fields of knowledge. Both critical thinking (the development of the skills and methods necessary for systematic investigation - i.e. the ability to define, analyze, and synthesize using a variety of methods and technologies) and the practical application of knowledge inform all elements of the program and are central to the transformation that distinguishes Whittier College graduates.

## Learning goals

I. Students should develop the ability to make connections across disciplines in order to understand the convergence and divergence of different fields of knowledge and to understand the nature of an academic community.
II. Students should develop an understanding of, and competency in, the use of signs and symbols to construct, create, perceive, and communicate meaning.
III. Students should develop the capacity to entertain multiple perspectives and interpretations.
IV. Students should develop an understanding of culture and the connections between themselves and others in relation to physical, historical, social, and global contexts.
V. Students should develop breadth, defined as familiarity with essential concepts in major fields, and depth, defined as knowledge of at least one field (usually achieved in the major).

## Outline of the Liberal Education Program Core

The goals of the Liberal Education Program are met by a set of core requirements that are contained in a framework of four categories. The selection of these four categories is a reflection of what we value most here at Whittier College.

- Community: The transformative experience begins in learning communities that introduce the idea of building connections across disciplines, as well as the importance of interdisciplinary approaches to understanding the world.
- Communication: Students learn to communicate understanding using different sets of symbols.
- Cultural Perspectives: Students gain cultural perspective by exploring different cultures.
- Connections: Students again connect as a community in the context of interdisciplinary courses and pairs.


## WHITTIER SCHOLARS PROGRAM

Throughout its history, Whittier College has been committed to high quality, innovative education and to a concern for the individual, particularly as a member of a community. The Whittier Scholars Programs exists within the context of those two traditions. It is a rigorous, individualized interdisciplinary program that offers an alternative approach to a liberal arts degree. Working with faculty advisors and their peers, students in the Scholars Program construct an educational program that is unique to them, as well as designed to make them educated individuals in the world today. Through interdisciplinary seminars, discussions with faculty and peers, and guest lecturers, students explore fundamental questions that help them define themselves and their goals and the role that education plays in helping them achieve those goals. These ideas are further explored as part of the requirement to complete an off-campus experience such as study abroad internship, or community service.
Central to the Scholars Program is the Educational Design process. Through an interdisciplinary seminar and with the assistance of a faculty advisor, students design their own course of study. Each design must have coherence and purpose while still supporting the goals of the individual student. All designs must be presented to, defended before, and approved by faculty members of the Whittier Scholars Council. Student reflection does not end with the Educational Design process. Rather, students continue to examine their goals, objectives and values on an ongoing basis throughout their course of study as part of all the Whittier Scholars Program seminars.
Although students design their own course of study, the program does have specific requirements unique to WSP. Three three-credit interdisciplinary seminars plus the Design Your Education course and a Senior Project and public presentation of the project are required to complete the program successfully. Because one of our ideals is the ability to communicate, the College Writing requirement also applies to those students in the WSP.
The seminars are taught by faculty members from across the College and focus on fundamental and enduring questions and topics that demand analysis, value
judgments and synthesis, and include significant student participation and research. Students come to grips with what they believe and why, but they also learn that the search is more important than any single answer. Through the seminars, there is a progression toward greater self-direction and discovery, which culminates in the Senior Project process.
The first course, "The Individual, Identity and Community," is the foundation course for the Scholars Program and is typically taken in the freshman year. It is designed to enable students to explore issues such as: human beings in a social context; the relationship between the individual and the community; the role of education and the life of the mind; and the ways in which values affect and play a role in asking and understanding enduring questions and analyzing issues. These themes are addressed in terms of different historical periods, disciplines, cultures and identities.
The WSP course of study then builds upon that seminar by having students continue to explore their own values in the Design Your Education class. That course is then followed by another interdisciplinary seminar called "Nature, Theory and Bases of Knowledge." This seminar explores various methods of gathering and understanding knowledge from a number of disciplinary perspectives. By the conclusion of the course, students should have an awareness of what knowledge is and also an understanding of the approach most appropriate for them as they begin the Senior Project process. The final course in the sequence is a Senior Seminar which enables students in the program to share their ideas and to peer review one another's work as they progress through the creation of a Senior Project.
The Senior Project is the culmination of the Whittier Scholars Program. The concept must be presented and defended to faculty members of the Whittier Scholars Program in the form of a proposal which frames the Project, places it in a disciplinary context, and provides a bibliography (where appropriate) and timetable for completion. Each student works on the Project with a faculty Sponsor selected by the student who serves as a mentor and guide through the process. The Project may be a research paper, an art portfolio, the production of a play, or anything else that allows each student to prove him/herself as a scholar and grows from the student's approved Educational Design. The Senior Project permits students to demonstrate that they can learn on their own, that they have attained a level of mastery appropriate to advanced undergraduate work, and that they are aware of the relationship of themselves and their work to others in their own and different disciplines. Students then share their Senior Projects with the larger Whittier College Community as part of a WSP Senior Symposium series.
Admission: Provisional acceptance to the Whittier Scholars Program requires admission to the College and completion of an application to the program concurrent with enrollment in one of the first two courses in the program. Full acceptance follows successful completion of the first seminar, the Educational Design course, and Whittier Scholars Council faculty approval of an Educational Design.

## Whittier Scholars Program Requirements

Six credits of College Writing (Freshman Writing Seminar and a second 3-credit approved writing course. Students admitted to the WSP may meet the second-
semester writing requirement by successfully completing WSP 101.)
An approved Educational Design
Whittier Scholars courses 101, 201, 301 and 401, all of which should be taken sequentially
An off-campus experience (study abroad, community service, and/or off-campus internship)
A Senior Project and Senior Symposium
Completion of 60 credits after the Educational Design has been approved
If a student transfers from the Whittier Scholars Program to the Liberal Education Program, the student must submit a formal letter signed by his/her advisor and the Director of the Whittier Scholars Program to the Registrar's Office. The Registrar will then evaluate the student's academic record as though the student were a transfer student with regard to the Liberal Education requirements. If a student chooses to enter the Whittier Scholars Program after his/her freshman year, then s/ he must meet with the Director of the Program to review necessary requirements including completion of WSP 101, 201, 301 and 401, and the acceptance of an offcampus requirement.

## WRITING PROGRAM

At Whittier College, each student learns to think critically and write effectively. Because the need to communicate clearly is essential in every discipline, faculty from every department share responsibility for improving students' writing abilities. For these reasons, the faculty have constructed a writing program that spans four years at Whittier College.
The Whittier College Writing Program begins with Freshman Writing Seminars. Among the most popular courses that freshmen take, these fall semester seminars are limited to 15 students and are taught by faculty from all disciplines on topics such as "Peaceful Paths: Nonviolence and Political Change", "Freedom and Liberty", and "What Do People Do All Day." The second component of the Writing Program is the Writing Intensive Course, which most students take in either the second semester of their freshman year or the first semester of their sophomore year. WICs are lower-division courses in most disciplines which emphasize writing as a process and build on the Freshman Writing Seminars. The third component of the program is "writing across the curriculum:" students write in all courses offered in the Liberal Education and Whittier Scholars Programs-including science and mathematics courses. Capping the Writing Program is the "paper-in-the-major." Written in the junior or senior year and a requirement for graduation, this paper demonstrates the student's command of his or her major's perspectives, methods, and body of knowledge, as well as his or her ability to communicate these skillfully in writing.

## REQUIREMENTS FOR GRADUATION

All undergraduate students entering Whittier College will follow one of two paths to a Whittier degree: the Liberal Education Program or the Whittier Scholars Program. The completion of all requirements for a degree is a student's responsibility. A student has
the option of completing graduation requirements prevailing at the time of admission or readmission, at the time of graduation, or any intervening year of continuous full-time enrollment. Graduation requirements cannot be selected from two or more catalogs.
Every junior must submit a Graduation Plan at pre-registration in the spring for fall semester. No junior will be allowed to register for his/her senior year until this plan has been submitted. All courses projected for the senior year should be included. Subsequent changes can be made by filling out the appropriate form in the registrar's office.
The Graduation Check Sheet, with any problems noted, will be returned by the start of the fall term. Students who do not finalize their Graduation Plans by the end of the add period for Spring Semester classes of their senior year may not be allowed to graduate with their class.
Students must monitor their own progress through frequent reference to the appropriate catalog. Consultation with faculty advisors as well as with the Registrar is suggested to assure satisfactory progress toward completion of the degree.
High school deficiencies may be met by enrolling in appropriate Whittier College courses, through a local high school or community college, through extended education or summer school courses, or by some other acceptable alternative. Students with high school foreign language deficiencies must take six credits of a single foreign language.
Both degree paths require a minimum of 120 credits for graduation, satisfaction of the College Writing Requirement (see College Writing Programs, page 76), and residence at Whittier College while completing a minimum of 30 credits of college work. Further, an overall grade point average of not less than 2.0 in Whittier College courses is required in order for a student to be eligible for graduation.

## REQUIREMENTS FOR THE MAJOR

Every student, by no later than the Fall registration period for the Spring semester of his/her sophomore year, will declare a major and select an appropriate faculty advisor. Students who transfer in with 45 credits or more must declare a major upon entrance. At each registration, a student has the opportunity to confirm or change his/her major. During non-registration periods, this can be done in the Registrar's Office. A minimum of 30 credits is required in the major field. See each department for specific course requirements.
A maximum of 48 credits in a single discipline may be counted toward the 120 credits needed for graduation. At least 72 units must be completed outside of the major. In a department housing two or more recognized disciplines, a maximum of 60 credits may be counted from the department.
At least 12 credits in the major must be taken at Whittier College.
A minimum grade point average of 2.0 is required in the courses taken from the major department.

## REQUIREMENTS FOR A MINOR

Minors may be earned as part of a student's academic achievement but are not
required for graduation. Students considering a minor should contact the faculty advisor for minors in their department of interest early in their academic career.
A minimum of 16 credits is required for a minor, and specific requirements are defined in this catalog for each department.

## GRADUATION REQUIREMENTS FOR TRANSFER STUDENTS

All Requirements for Graduation apply, as stipulated in the previous pages, with the exceptions indicated below.
The Registrar of Whittier College will determine which credits transferred from another institution may be used to satisfy each requirement.
Adjustments of the Graduation Requirements (based on Undergraduate Standing at entrance):
Liberal Education Requirements: All students with transfer credits, regardless of the number of transfer credits that satisfy Liberal Education Program requirements, must complete one set of paired courses or a team-taught sequence in Comparative Knowledge at Whittier.

## ACADEMIC SUPPORT PROGRAMS AND SERVICES

## Bonnie Bell Wardman Library

Bonnie Bell Wardman Library is situated in the geographic center of Whittier College. Named in honor of one of the College's great benefactors, and one of the most recognizable structures on campus since its dedication in 1965, the Library is also in many ways the intellectual hub of the institution.
Slightly enlarged, greatly modernized, and rededicated in 2003, Bonnie Bell Wardman Library offers students and faculty a spectrum of spaces and tools for many different kinds of activities and encounters. Computer clusters with free scanning, printing, and photocopying include several large-screen Macs that can be used for digital audio and video editing and viewing. Ten study spaces and classrooms are Internet and media ready, as is a dedicated digital media viewing room. For laptop users, Wi-Fi throughout the building allows for wireless connectivity. And two sites have proved extremely popular since their recent inception: the "Crow's Nest," an extensive student lounge on the top floor; and the Faculty Alcove, a technology center designed specifically to develop innovative teaching materials based in Open Source and Web 2.0 concepts. These exciting new tools and amenities are available at all times during ninety-two hours of service throughout the week.
The Library's collection comprises traditional paper-based monographs and periodicals, with increasing tendency toward and development of electronic resources, especially in the area of scholarly journals. Currently, the collection totals over 300,000 volumes, with subscriptions to over 600 print and approximately 17,000 electronic journals, many of which are accessible through a variety of recently upgraded academic databases. Circulation, reference, and interlibrary loan services are available to all members of the Whittier College community; the Library is also a member of LINK+, a patron-initiated interlibrary loan system that allows for resource sharing between over fifty member libraries.

In addition to its main collection, Wardman Library curates a wide assortment of historical materials. Special collections are tied to the Quakers or the College's history, and the Library also hosts on its main floor the Whittier Area Genealogical Society's extensive collection of research materials. Researchers can access these special collections by appointment. Currently, the Library is engaged in building digital collections of its historical holdings, including 100 years of The Quaker Campus, historical materials related to the town of Whittier, 500 photographs, autograph letters by John Greenleaf Whittier, papers of and about Jessamyn West, Quaker autobiographies, and a selection of nineteenth and early twentieth century African American sources. The College Library is also collaborating with the Nixon Presidential Library to create an online digital collection of sources related to Richard Nixon, his family, and regional Contexts. Finally, coextensive with the Library is the administration of the Fairchild Aerial Photography Collection. One of the largest libraries of aerial photographic images in the United States, the Faichild Collection comprises more than 500,000 items, including prints, negatives, photoindices, and photomosaics.
To advance its mission to support teaching and learning, Wardman Library offers a variety of instruction, focusing primarily on research skills, electronic resources, and new technologies. Its Media and Academic Technology Services encompasses a range of instructional, research, and outreach services, including audio-visual support, classroom tech support and setups, conversion services, and acquisitions to the film collection.

## Broadoaks Children School

The Broadoaks children's School was founded in 1906 as an open-air kindergarten and primary school. It soon became a center for the study of children and the preparation of teachers. Now in its second century, the internationally recognized demonstration school serves two interrelated purposes: (1) to provide outstanding educational, recreational and child care services for children and their families and (2) to provide a "learning laboratory" for Whittier College students and faculty in child development, education, social work, psychology, public policy, and related fields. Approximately 325 children attend Broadoaks in preschool through middle school.
Approximately 250 Whittier College students work and study at Broadoaks each year. College students participate actively in instructional planning and evaluation, as well as in interdisciplinary case conferences, child assessments, research with faculty members, and a variety of related professional organizations and activities. Each year Broadoaks awards a few highly selective Undergraduate Teaching Fellow positions and Graduate Teaching Fellow Awards. Broadoaks also provides financial assistance to undergraduate students traveling to conferences to present their research.
The preschool, elementary, and middle-school curriculum emphasizes active, self-initiated learning; critical thinking; problem solving; artistic self-expression; intercultural understanding; and shared responsibility. The school follows the California State Standards in all areas of the curriculum and incorporates scientific investigation across the curriculum under the auspices of the Broadoaks Science Academy, which is offered both during the summer and during the regular school year. The school also offers a variety of co-curricular activities, such as student
leadership, advanced learner's program, community service, cooking, gardening, arts and crafts, creative writing, and music.
In 2003 the Director of Broadoaks was named a Fulbright Research Scholar for her work on children's peer relationships. Other members of the Broadoaks faculty and staff are involved in a variety of professional activities, including child advocacy, family support, and early education organizations.
Broadoaks offers summer programs for the preschool through eighth grade. Broadoaks sponsors several summer academies, including Science, Technology, Woodworking and Design, Music, Spanish, and Children's Philosophy.
Several members of the Whittier College faculty and their students conduct scientific studies at Broadoaks. Recent research topics include children's eyewitness testimony, children's self-perceptions, children's friendships, children's ideas about strangers, conflict resolution strategies, children as planners, and the development of children's ethnic identity and inter-group friendships.
Broadoaks is home to the first collegiate chapter of OMEP, an international children's rights group associated with the United Nations and UNICEF; Delta Phi Upsilon, a national honor society in childhood education; and Delta Kappa Gamma, an international honorary society for those who work in the field of education.
Broadoaks also offers professional development programs for teachers and administrators, as well as fieldwork placements for international students. Further information is available from the Broadoaks school office and on the school's website: http//web.whittier.edu/Broadoaks.

## Campus Center

The creation of a new Student Union was identified as a top priority in the College's Strategic Plan. Funded through a combination of gifts and bond proceeds, the new Campus Center was completed in the fall of 2008 and the college community celebrated its grand opening on October 17, 2008. The Center consolidates into one location Whittier's student life programs and offices including the Dean of Students, Residential Life, Career Planning and Internships Office, Roberta G. Veloz Leadership Experience, and Programs (LEAP), and the Ahmanson Cultural Center. The Mailroom and Copy Services occupy a key location in the west entryway. Student Publications, Student Government, Video Production Club and KPOET Radio Station are located on the ground floor. The Center also houses the Campus Inn dining, the Spot Café, the Chef's Dining Room, the Richard P. Ettinger Lounge, Olive \& Bob Clift Bookstore, Rose Hills Courtyard and Bill \& Harriet's Club 88. A.J. Villalobos Hall is a beautifully appointed stand alone facility that provides multipurpose space for a variety of campus events.
In thinking about the new Campus Center, our goals were to create a visually attractive and up-to-date commons for the entire College community-a place to eat and socialize-a place for both resident and commuting students to congregate-and a place for students to conveniently do their business. Distinguished architect Brenda Levin, of Levin and Associates, helped Whittier to successfully translate our vision into a vital and lovely reality.
Visit the following website for more information http://web.whittier.edu/campuscenter/index.html

## Residence Halls

The renovations of Stauffer, Johnson and Ball Hall were initiated to improve the housing experience for the students. While infrastructure improvements and upgrades were the impetus for the project, aesthetic and accessibility issues were also addressed in the redesign of the buildings.
The complete mechanical, electrical, and plumbing systems were replaced to improve functionality and maintainability. The boilers for both the heating and domestic water systems were replaced and new piping, registers, and controls were installed to improve reliability and reduce operational costs. The bathrooms were essentially gutted and redone with new piping, fixtures, partitions and lighting. ADA improvements such as creating two accessible restrooms on the first floor, a new ramp for exterior access, and a new ramp for lobby access were made.
Aesthetically, the building interiors were significantly upgraded. The general look and feel of the buildings was improved by redesigning the lighting in all common areas including hallways and lounges. The sub lounges were also painted, recarpeted, and the existing furniture were reupholstered and refurbished. Hallways were re-carpeted, all student rooms were painted, and many student room doors were refinished. These renovations improved the quality of student life for all of the first year students who reside on campus and greatly extended the useful life of these three large residence halls.

## Campus Safety

While safety and security is everyone's responsibility, the Department of Campus Safety is authorized to protect the college community and property. In seeking a safe environment for all, the staff provides patrol services 24 hours a day, 7 days a week. They respond to emergencies and calls for service, secure buildings, register vehicles and bicycles, report safety hazards, enforce vehicle regulations, state/federal laws and college policies; procedures. They provide programming in the following areas: Crime Prevention, Operation I.D., Emergency Preparedness, Self Defense (RADS/S.A.F.E./RadKids), Fire Prevention, General Safety and First Aid/CPR. The fulltime staff of 14 is complemented by a student work force of 24 in a variety of positions, as well as 4 reserve officers.

## The Clift Microcomputer Lab

The Clift Microcomputer Lab, located in Hoover Hall, was upgraded recently (20062007) and now has flat screen monitors, faster processors, and the current version of Microsoft Office. The Lab also has LAN connectivity, a video projector, and a lecture podium for small group learning. The updated Lab is generally open and available to students from 8 AM to 10 PM on Mondays through Thursdays, 8 AM to 5 PM on Fridays, and noon to 10 PM on Sundays. The Lab also has a laser printer that is available for use at a nominal cost. The purpose of this Lab is to provide students with the IT support to develop business-related skills, including numerical and word processing, statistical analysis, and general business applications.

## The GTE Language Resource Center

The GTE Language Resource Center is designed to support courses offered by the

Department of Modern Languages and Literatures. Currently courses are offered in Spanish, French, Chinese and Japanese. The Resource Center can accommodate up to 24 students at 14 workstations ( $13 \mathrm{PCs}, 1 \mathrm{Mac}$ ), and is frequently used by other departments as well. Up-to-date computer software allows students access to both digital audio and video. Instructors utilize the Internet and digital media as a tool to bring authentic, meaningful culture to their students and learning is enhanced through exercises to develop higher levels of skill in speaking, listening, reading and writing. Tutoring services in each language are available for free during many hours of the day as well. Students can also utilize CD-ROM's, DVD's and watch videos from around the world using the international VCR, or watch international channels available on satellite. Finally, scanning and character recognition of multiple European and Asian languages is also available.

## Information Technology Services

IT Services offers a wide array of computing, networking, and telecommunications resources and services to members of the college community to facilitate teaching and learning, research, and administrative activities and to further the College's mission. Among the services we provide are voice and data communications including network service to the residence halls, administrative computing including self-service access to administrative services via the web, e-mail and calendaring, course management, and web and web portal services

## Lautrup-Ball Cinema

This newly renovated room serves the College primarily as a teaching space, but also houses the two film series which take place on campus each year. The room contains 145 comfortable theater style seats with convenient "swing up" writing surfaces. In addition to projecting slides and 16 mm films, instructors can project media in all formats (including videotape, computer applications, "Elmo" visual presentations, etc.) on a large screen via a ceiling mounted LCD projector. The small stage area makes this location ideal for presenting guest lecturers and chamber music.

## Math Lab

The Mathematics Department operates a Math Lab in the Science Building. The facility has a dozen computers and a variety of math software to be used as instructional aids. Students in freshman calculus classes make extensive use of this facility.

## Ruth B. Shannon Center

The Ruth B. Shannon Center for the Performing Arts, which opened in the fall of 1990, houses the 400-seat Robinson Theatre and the intimate Studio Theatre capable of seating from 75 to 100 patrons in a flexible seating configuration. The Shannon Center is home to the Theatre and Communication Arts Department and is the primary performance facility for the Theatre and Music departments, student organizations, and professional presentations open to the general public. This beautiful 28,000 square-foot building also includes scenic construction facilities, a costume construction shop, prop and costume storage, two large group dressing rooms, a classroom and faculty offices.Additional information about current programming is available on the Shannon Center website: www.shannoncenter.org.

## Division of Humanities

Department of Art and Art History
Department of English Language and Literature
Department of History
Department of Modern Languages and Literatures
Department of Music
Department of Philosophy
Department of Religious Studies
Department of Theatre Arts and Communication

## Division of Natural Sciences

Department of Biology
Department of Chemistry
Department of Earth and Environmental Science
Department of Mathematics
Department of Physics and Astronomy

## Division of Social Sciences

Department of Business Administration
Department of Economics
Department of Education and Child Development
Department of Kinesiology and Leisure Science
Department of Political Science
Department of Psychology
Department of Sociology, Anthropology and Social Work

## Course Numbering

1-69 Experiential courses
70-99 Courses which may not be counted toward the major in the discipline of origin
90, 190, 290, 390, 490, 590 Selected topics courses
295, 395, 495, 595 Independent studies
100-199 Generally appropriate for freshmen
200-299 Generally appropriate for freshmen and sophomores
300-399 Generally appropriate for sophomores, juniors, and seniors
400-499 Generally appropriate for juniors, seniors and graduate students.
500-699 Graduate courses

The groups listed above are general guidelines, but they may not be accurate descriptions for all courses in all departments. The sections of the catalog devoted to individual departments provide more precise information.
Numbers in parentheses in this catalog indicate the former number of the course.
The letters A, B, ...following the course number indicate courses are sequential. Each course in the sequence, or academic background equivalent to that course, is normally a prerequisite to the next course.

## MAJORS

Anthropology/Sociology
Art:
Art History Track
Studio Art Track
Studio/Art History Track
Biochemistry
Biology
Business Administration:
Accounting Concentration
Finance Concentration
International Business Concentration
Management Concentration
Marketing Concentration
Chemistry
Chemistry with ACS Certification
Child Development
Chinese
Economics:
Business Economics Option
General Distributive Option
Pre-Professional Economics Option
Engineering 3-2
Engineering 3-2 Chemistry
Engineering 3-2 Mathematics
Engineering 3-2 Physics
Engineering 3-2 Science \& Letters
English:
Creative Writing Emphasis
Environmental Science:
Environmental Studies Track
Environmental Science Track

French
Global \& Cultural Studies
History
Kinesiology \& Leisure Science: Pre-Physical Therapy Emphasis
Recreation \& Sports Management Emphasis
Teaching \& Coaching Emphasis
Mathematics:
Teaching Credential Emphasis
Mathematics Business
Music
Applied Philosophy
Philosophy
Physics:
Astronomy Emphasis
Political Science:
International Relations Track
Psychology
Religious Studies
Sociology
Social Work
Spanish
Theatre \& Communication Arts:
Design \& Technology Emphasis Performance Emphasis

## MINORS

Anthropology
Art History
Biology
Business Administration
Chemistry
Child Development
Chinese
Economics
Elementary Education
English
Film Studies
French
French Cultural Studies
Global \& Cultural Studies
Gender \& Women's Studies
History
Japanese
Kinesiology
Mathematics
Music
Philosophy
Physics
Political Science
Psychology
Religious Studies
Scientific Computing
Sociology
Social Work
Spanish
Studio Art
Theatre \& Communication Arts

Jenny Herrick

Danny Jauregui
Ria O'Foghludha
Paula Radisich, Chair
David Sloan

Art History is the study of art objects and their relationship to culture. Courses in art history strive to utilize local art collections, including those at the Getty Center and Villa, the Norton Simon Museum, the Huntington Library, the Los Angeles County Museum of Art, and the Museum of Contemporary Art. With additional study at the graduate level, art history can lead to professional careers in college teaching, museum curatorship, fine arts librarianship, and publishing.
Studio art courses focus upon the creation of works of art: drawings, paintings, prints, sculptures, ceramic pieces and digital works. The studio art program emphasizes the concepts, materials, methods, and forms most commonly found in contemporary art. Students are guided toward mastery of technique and expression of ideas, which can be further pursued in graduate school, and lead to professional careers in fine arts, design, fashion, architecture, gallery and museum work, and teaching. Los Angeles is one of the most vital art centers of the world and serves as a rich learning resource.

## GUIDELINES FOR A MAJOR IN ART

The major in art offers three tracks: Studio Art; Art History; and Art and Art History (offering an even balance between studio art and art history classes)

## Studio Art Track, 30 credits minimum

## Requirements

Foundation Courses, 9 credits. These classes should be completed first, in any order.
Introduction to Art 2-D, ART 100, 3 credits
Introduction to Art 3-D, ART 101, 3 credits
Drawing 1, ART 210, 3 credits
Intermediate Courses, 12 credits. These classes should be completed next, in any order.
Painting 1, ART 222, 3 credits
Sculpture 1, ART 252, 3 credits
Digital Art, ART 200 or 201, 3 credits
Contemporary Art, ART 370, 3 credits
Advanced Courses, 6 credits minimum. After the foundation and intermediate courses have been completed, which must be accomplished before the senior year, one becomes eligible to take the advanced courses.

Advanced Art Seminar, ART 388, 3 credits
Must be taken at least two times, 6 credits minimum

## Art History Elective, 3 credits

In addition to Contemporary Art (listed among the intermediate courses on the previous page), at least one additional art history course must be completed. Art majors following the studio track are encouraged to take more than the minimum number of art history classes.

## Senior Project, 0-4 credits

The senior project in studio art is a graduation requirement, but it can be completed in a number of ways. In all cases the senior project must be presented to a public audience. This is ordinarily accomplished by presenting either a solo exhibition or a two-person exhibition of senior project artwork. The following list identifies the ways in which the senior project requirement can be completed:

- Enroll for senior project credits under the supervision of a studio art faculty member; Art 389, Senior Project in Studio Art, 1-4 credits;
- By agreement with the studio art faculty members, you may present a major project you have recently completed at the annual Colloquy (takes place in December) in your senior year;
- Create a coherent body of work in Advanced Art Seminar and/or other studio art courses taken within the senior year


## Art History, 30 credits minimum Requirements

A minimum of nine art history courses ( 27 credits) must be taken. 15 credits are required from the list of intermediate courses. ART 391 or 392 is required as an advanced course. One studio art elective of the student's choice completes the track.
In addition, each student must complete and publicly present a senior project. Presentation of the senior project takes place at the fall Colloquy, in December.

## Introductory Courses

Western Art: Pre-history through the 14th Century, ART 205, 3 credits
Western Art: 15th through 20th Centuries, ART 206, 3 credits
Women and the Visual Arts, ART 207, 3 credits
Expressive Arts of Africa, ART 211, 3 credits
Intermediate Courses, minimum 15 credits
Art of Ancient Greece and Rome, ART 361, 3 credits
Art of the Medieval West, ART 362, 3 credits
Early Renaissance Art in Italy, ART 363, 3 credits
The High Renaissance and Mannerism, ART 364, 3 credits
Art of the Eighteenth Century, ART 366, 3 credits
Age of Impressionism, ART 368, 3 credits
Age of Dada and Surrealism, ART 369, 3 credits
Contemporary Art, ART 370, 3 credits
Art of Mexico, ART 381, 3 credits
Art of Colonial Spanish America, ART 382, 3 credits
Special Topics in the History of Art, ART 390, 3 credits
Advanced Course, 3 credits minimum. 391 or 392 must be taken within the junior or senior year. Either may be repeated for credit.

Seminar in art from the Ancient through the Renaissance periods, ART 391, 3 credits Seminar in art from the Early Modern through the Modern periods, ART 392, 3 credits Studio Art Requirement, 3 credits
One studio art course, 3 credits

## Recommended

Study abroad
Foreign language study
A double major (many combinations are possible) or an interdisciplinary minor, such as French Cultural Studies

Art and Art History Track (The Balanced Curriculum), 33 credits minimum This option allows a balance between studio and art history coursework. The balanced curriculum is designed to meet the needs of students with keen interest in both areas of study. It also provides much of the breadth (studio and art history) required by teacher credentialing standards in art. The senior project may be completed following the standards shown in either the Studio Art Track section or the Art History Track section.

## Requirements

Foundation Courses, 9 credits. Among the required studio courses, these are to be completed first.
Intro to Art 2-D, ART 100, 3 credits
Intro to Art 3-D, ART 101, 3 credits
Drawing 1, ART 210, 3 credits
Intermediate Courses, 6 credits. These studio requirements should be completed next.
Painting 1, ART 222, 3 credits
Sculpture 1, ART 252, 3 credits
Advanced Course, 4 credits minimum. After the studio requirements listed above have been completed, which should be accomplished by the end of the junior year, the A\&AH major becomes eligible to take the advanced courses.

Advanced Art Seminar, ART 388, 3 credits
Art History, 15 credits
Any five art history classes
Senior Project-Complete the senior project following the standards described in either the Studio Art Track section or the Art History Track section.

## GUIDELINES FOR THE MINOR IN ART OR ART HISTORY

Minor in Art History, 18 credits minimum
Requirements
Any six art history courses

## Minor in Studio Art, 18 credits minimum Requirements

Drawing 1, ART 210, 3 credits
Introduction to Art 2-D, ART 100, 3 credits or
Introduction to Art 3-D, ART 101, 3 credits
Painting 1, ART 222, 3 credits or
Sculpture 1, ART 252, 3 credits
Any three additional studio courses, 9 credits minimum

## ART HISTORY COURSES

## 205 Western Art: Pre-history through the 14th Century

Surveys art beginning with the Paleolithic age through the ancient civilizations of Mesopotamia, Egypt, Greece, Rome, Medieval Europe, and Byzantium up to the early Renaissance. Stresses cultural context and style. One semester, 3 credits.

## Art 206 Western Art: 15th through 20th Centuries

Surveys the visual arts of Europe from the Renaissance to the present. One semester, 3 credits.

## 207 Women and the Visual Arts

Historically oriented examination of women artists from the Renaissance through the Modern periods, followed by an exploration of theoretical issues involving women and representation. One semester, 3 credits.

## 211 Expressive Arts of Africa

Explores the symbolic and aesthetic representations, implicitly understood and explicitly expressed by selected African peoples in cultural communication. The concepts discussed will center around the relationship between art, ritual, and symbols in cultural expression. The focus is the expressive cultures of sub-Saharan Africa as communicated mainly in the sculpture of the region. The aim is to read culture through art and to understand how Africa's visual arts constitute the cultural encyclopedia of specific African groups. (Same as ANTH 321) One semester, 3 credits.

## 361* Art of Ancient Greece and Rome

Examines the visual arts of ancient Greece and Rome. Recommended prerequisite: Art 205. One semester, 3 credits.

## 362* Art of the Medieval West

Surveys art and architecture of Western Europe from the Early Christian period to the beginnings of the Renaissance. Recommended prerequisite: Art 205. One semester, 3 credits.

## 363* Early Renaissance Art in Italy

Explores painting, sculpture, and architecture in Italy, especially in Florence and Siena, from the thirteenth through the fifteenth centuries; emphasis will be on cultural and historical context. Recommended prerequisite: Art 205. One semester, 3 credits.

364* The High Renaissance and Mannerism Art and architecture in Florence, Rome, and Venice in the later fifteenth and sixteenth centuries, with special attention to the works of Leonardo, Michelangelo, Raphael, and Titian. Recommended prerequisite: Art 206. One semester, 3 credits.

## 366 Art of the Eighteenth Century

Explores painting, sculpture, architecture and decorative arts in France, Great Britain, Spain, Germany and Italy from approximately 1700 to 1800. Recommended prerequisite: Art 206. One semester, 3 credits.

## 368 Age of Impressionism

Explores the visual arts in Paris during the last half of the 19th century from the perspective of modernism, asking how and why the painting of modern life, practiced by Manet, Degas and the Impressionists, became transformed into the Symbolist movement, including artists such as Gauguin and Van Gogh. Recommended prerequisite: Art 206. One semester, 3 credits.

## 369 Age of Dada and Surrealism

Explores the visual arts during the first half of the 20th century, concentrating on Dada and Surrealism and its antecedents such as Cubism, Futurism, and Suprematism. The relation of these movements to World War I, the rise of Fascism, and World War II will be examined. Recommended prerequisite: Art 206. One semester, 3 credits.

## 370 Contemporary Art

Explores the visual arts since 1950, with special emphasis on recent developments. Recommended prerequisite: Art 369. One semester, 3 credits.

## 381 Art of Mexico

Examines the art of Mesoamerica and Mexico from the time of the Olmecs to the twentieth century. Recommended prerequisite: Art 206. One semester, 3 credits.

## 382 Art of Colonial Spanish America

Examines the art produced within the interaction of different ethnic groups under Spanish \& Portuguese rule in Southwestern United States, Central America and South America. Recommended prerequisite: Art 206. One semester, 3 credits.

391 Seminar in art from the Ancient through the Renaissance periods
Explores an art historical topic from the Ancient, Medieval, or Renaissance periods. Focus is upon mastering the disciplinary modes of proposition and analysis used to write about the visual. Topics will vary; may be repeated for credit as topic changes. Junior or senior standing required; limited to art history students. One semester, 3 credits.

## 392 Seminar in art from the Early Modern through the Modern periods

Explores an art historical topic from the seventeenth, eighteenth, nineteenth or twentieth centuries. Focus is upon mastering the disciplinary modes of proposition and analysis used to write about the visual. Topics will vary; may be repeated for credit as topic changes. Junior or senior standing required; limited to art history students. One semester, 3 credits.

190, 290, 390 Selected topics in art history Variable. Permission. May be repeated for credit.

## 295, 395 Directed Study

Variable. Permission. May be repeated for credit.

## STUDIO ART COURSES

NOTE: Students enrolling in Studio Art classes are charged a materials fee.

## 100 Introduction to Art 2-D

Explores a variety of processes for creating two-dimensional images, using materials and techniques such as drawing, painting, collage, simple printmaking, and mixed media. Emphasis will be on understanding how basic visual elements (line, shape, form, space, color, and texture) are used in contemporary art. Color theory will be included. One semester, 3 credits.

## 101 Introduction to Art 3-D

Explores a variety of processes for creating three-dimensional objects, using materials and techniques emphasizing wood, steel and mixed media. Effective use of the qualities of line, shape, form, mass, and texture will be emphasized in making sculptural creations. One semester, 3 credits.

## 200 Digital Art: Photography and Print Media

This course explores the processes, practices and concepts of digital photography, focusing on digital capture, imaging and printing.

Students will become acquainted with the computer, digital SLR camera, Photoshop and printing from a fine art standpoint. Students will formulate creative solutions for their class projects through the marriage of technical skills, conceptual originality and aesthetic interests. Projects are designed to draw upon historical, social and artistic contexts found in traditional and digital photography. No prerequisite is required, however previous enrollment in Drawing 1 or Introduction to Art $2-\mathrm{D}$ is recommended. One semester, 3 credits.

## 201 Digital Art: Video and Time Based Media

This course focuses upon production and presentation of digital video work for dissemination to wide ranging audiences. Instruction will include how to use digital video cameras, and authoring and editing software. This course will also examine critical and interdisciplinary frameworks for evaluating digital videos aesthetically, and within historical and social contexts. Discussions, screenings, fieldtrips and readings will help students understand the most prominent modes of art video over the past forty years, providing a rich context within which to complete class assignments. No prerequisite is required, however previous enrollment in Drawing 1 or Introduction to Art 2-D is recommended. One semester, 3 credits.

## 203 Digital Art Workshop: Graphics and Multi Media

This course will acquaint students with some of the most commonly used software design tools such as Adobe Illustrator and InDesign. Emphasis will be placed on visual communication for broad and diverse audiences. Instruction will cover topics such as color theory, composition, image-text integration, single page composition as well as multiple page organization, typography, sequential flow (both linear and non-linear), continuity and emphasis in a moving field. The assignments will include consideration of graphics, fine arts and community engagement, applied in creating public service announcements, advocacy graphics and artrelated publications. Many of the projects will be collaborative with students working in teams of two or more. No prerequisite is required, however previous enrollment in Drawing 1 or Introduction to Art 2-D is recommended. January session, 4 credits.

## 210 Drawing I

Course designed for beginning art majors and non-art majors (those students who wish to earn the fundamentals of drawing). Many operative aspects of drawing and principles of design are presented. Emphasis is placed on analytical study of composition, space, proportions, line, value and texture, etc. Upon completing this course, the student should have a solid practical knowledge of various drawing techniques. One semester, 3 credits.

## 217*, 317* Painting Workshop

Drawing and painting with emphasis on color, design and pictorial expression. Subjects for projects will vary. May travel to do landscape paintings. January session, 4 credits.

## 218*, 318* Drawing Workshop

An intensive 4 week long workshop in which the student is presented with a variety of drawing techniques, such as wet and dry media. Gesture drawing, collage, gouache, etc. are explored. In the beginning, the emphasis is placed on the fundamental principles of design and the operative aspects of drawing. As the course of study develops, stress is placed on more nontraditional, and experimental drawing approaches. Work from the model will be possible for those interested in figurative expression. January session, 4 credits.

## 219*, 319* Ceramic Sculpture Workshop

Clay sculpture. Problems designed with hand forming methods to techniques of clay construction and design with emphasis on the basics of sculpture. January session, 4 credits.

## 220*, 320* Sculpture Workshop

Explores the properties and primary working methods of plaster casting the human form with emphasis on the basics of sculpture. The individual develops sculptural expression with attention to visual properties and qualities of content. January session, 4 credits.

## 221* Printmaking Workshop

Introduces the students to the printmaking medium by presenting traditional and experimental processes in a condensed, intensive 4 -week class. January session, 4 credits.

## 222, 323 Painting I, II

Acrylic or oil painting and related media as vehicles for creative expression. Structural, spatial, and symbolic uses of color are explored. Prerequisites: 100 or 210 . One semester, 3 credits.

## 232, 332 Ceramics I, II

Problems designed to take the student from basic hand forming methods to advanced techniques of clay construction and design. Recommended: ART 101. One semester, 3 credits.

## 242, 343* Printmaking I, II

An initial study of basic processes of preparing and printing the inked surfaces of metal, wood, and linoleum plates, as well as, other intaglio and relief printing surfaces. The student is presented with a variety of techniques, proper and safe use of the shop equipment and tools, and the basic aspects of preserving, collecting and curating prints of fine art. The student has first hand, i.e. methodical, experience in engraving, dry point, line etching, aquatint, soft ground, lift ground, linoleum-cut, wood cut, and other basic mixed intaglio and relief processes. Prerequisite: 100. Permission required for Printmaking II. One semester, 3 credits.

## 252, 353 Sculpture I, II

Using techniques of wood construction, welding, assemblage and modeling the individual develops sculptural expression with attention to visual properties, spatial organization and qualities of content. Prerequisite: 101. One semester, 3 credits.

## 300* Computer Art II

A continuation of Computer Art I with emphasis placed on developing one's own imagery and innovative approaches towards computer software and peripherals. The objective is for students to further deepen their understanding of contemporary art using the computer as a tool. Prerequisite: 200. One semester, 3 credits.

## 301 Special Projects in Computer Art

A continuation of Computer Art I and II. Designed for advanced students in studio art to further explore their aesthetic and conceptual ideas using the computer as a tool. May be repeated for credit. Prerequisite: 300 or instructor's permission. One semester, 3 credits.

## 303* Printmedia in Visual Communications

Encompasses both traditional and digital printmaking processes with a strong emphasis on the history of 20th-century graphics and printed images in visual communications. Major movements in printed graphics such as the Russian Avant-garde, Bauhaus and Die neue Sachlichkeit in the Weimar Republic, the

WPA Federal Arts Project, Chinese Propaganda Posters, Solidarnost Posters from Eastern Europe, Mexican Revolutionary Posters are studied. Connection between diverse cultural, political, and economic communities and issues such as urban society, religion, ethnicity, and cultural and political changes are analyzed by examining, and better understanding, prints and multiples. The ultimate goal of the course is to enable students to create their own imagery utilizing a variety of printing techniques and the computer as a tool in their own art making. Prerequisite: 100 or instructor's permission. One semester, 3 credits.

## 310* Figure Drawing

Introduction to figure drawing with awareness of the human body's basic structure and form. Emphasis is placed on development of perceptual awareness of the human figure through appropriate exercises. Concepts and principles from Drawing I, with an emphasis on the human figure, are explored. May be repeated for credit. Prerequisite: 210 . One semester, 3 credits.

## 311* Special Projects in Drawing

A continuation of the objectives of Art 100 and 210. Designed for advanced students in studio art to further explore their aesthetic and conceptual ideas in drawing, painting, printmaking and mixed media. May be repeated for credit. Prerequisites: 100 and 210. Permission. One semester, 3 credits.

## 316* Watercolor

Exploration of watercolor as a medium for creative expression. Structural, spatial, and symbolic uses of color are explored. Experimentation with other media in combination with watercolor. May be repeated for credit. Prerequisites: 100 and 210. One semester, 3 credits.

## 324* Special Projects in Painting

A continuation of the objectives of Art 100 and 222. The student is expected to integrate conceptual and aesthetic concerns with a serious exploration of the medium's potential. May be repeated for credit. Prerequisite: 323. Permission. One semester, 3 credits.

## ART \& ART HISTORY COURSES

## 334* Special Projects in Ceramics

Experimentation with glazes, materials, and colorants. Problems in clay designed to meet individual needs. May be repeated for credit. Prerequisite: 333. Permission. One semester, credits.

## 344 Special Projects in Printmaking

A continuation of Printmaking I and II. Designed for advanced students in studio art to further explore their aesthetic and conceptual ideas through matrix or non-matrix printmaking. May be repeated for credit. Prerequisite: 343 , or instructor's permission. One semester, 3 credits.

## 354* Special Projects in Sculpture

Advanced work in sculpture. Further exploration and refinement of personal style and content. Projects designed to meet individual needs. Prerequisite: 252. One semester, 3 credits.

## 388 Advanced Art Seminar

Consists of a combination of seminar format presentations and discussion combined with studio-based artistic creation. Course content focuses upon the most important individuals, concepts and practices in the art world in recent decades. Enrollment in this class is generally restricted to those pursuing the Studio Track or the Art and Art History Track. May be repeated for credit. Prerequisite: completion of Foundation and Intermediate courses in the major. One semester, 3 credits.

## 389 Senior Project in Studio Art

Through coordination with a studio art faculty member the student completes a significant project or a coherent series of projects. The work create in this course is presented in the student gallery as the senior exhibition. Typically this course is taken concurrent with the second semester of Advanced Art Seminar. May be repeated for credit. Prerequisite: completion of Foundation and Intermediate classes in the major. To be taken in the fall semester of the senior year. One semester, 1-4 credits.

## 295, 395, 495 Independent Studies

Credit and time arranged. Permission. May be repeated for credit.

# David Bourgaize, The Fletcher Jones Professor of Molecular Genetics, Chair 

Erica Fradinger
Stephen R. Goldberg, The Roy E. and Marie G. Campbell Professor of Biology
Sylvia Vetrone
Cheryl Swift, The James Irvine Foundation Professor of Biology
Hector Valenzuela

$\tau$he Biology major at Whittier College is designed to produce graduates with a strong background in the organization and complexity of living systems, hypothesis testing and experimental design, and oral and written presentation of data. These skills prepare our graduating majors for careers in teaching, research and health related fields because of our emphasis on "doing science" in addition to learning to use instrumentation to make measurements, to analyze and present data, and to place their findings in the larger context of published science. Faculty work closely with students to help them develop research skills within coursework through inquiry based learning, and outside coursework through undergraduate research. Our courses regularly take advantage of the nearby San Gabriel Mountains and the Mojave and Sonoran deserts as well as the Pacific Coast. An extensive wildlife preserve adjacent to the college in the Puente Hills also provides an outdoor laboratory. Other courses take advantage of equipment in a laboratory setting.

## GUIDELINES FOR A MAJOR IN BIOLOGY

The major is organized around the hierarchical structure of living organisms within an over arching theme of the evolution of living things. Students are required to take three introductory courses dealing with cell form and function, the form and function of organisms, and the ways in which populations of organisms interact with each other and their environment; more advanced coursework is completed by selecting courses from cellular and molecular, organismal, and population focused courses. Major requirements also include a research methods course and a senior seminar.
The course selections for the major reflect those sub-disciplines and approaches to biology.
The major requires completion of a minimum of 36 credits in Biology, with the following provisions:

1. Completion of four foundation courses:

Cell and Molecular Biology, BIOL 151, 4 credits
The Biology of Organisms, BIOL 152, 4 credits
Ecology and Evolution of Organisms, BIOL 251, 4 credits

Research Methods in Biology, BIOL 252, 4 credits
2. Completion of at least 20 credits in Biology at the 300 level or above.
3. Seminar, BIOL 493, 1 credit
4. Completion of one course from each of the following organizational levels (Note: courses listed in multiple categories can only be counted in one of the categories):
A. Cellular-Molecular-a study of cell structure and molecular-controlled functions

Immunology, BIOL 331, 4 credits
Microbiology, BIOL 343, 4 credits
Cell Physiology, BIOL 380, 4 credits
Molecular Genetics, BIOL 381, 4 credits
Developmental Biology, BIOL 404, 4 credits
Animal Histology, BIOL 407, 4 credits
B. Organismal-a study of the organism, the congruence of form and function, and the maintenance of its internal environment.

Human Physiology and Anatomy, BIOL 300A,B, 4 credits each
Comparative Vertebrate Anatomy BIOL 345, 4 Credits
Herpetology, BIOL 360, 4 credits
Entomology, BIOL 386, 4 credits
Animal Physiology, BIOL 428, 4 credits
The Southern California Flora: Ecology, Evolution and Taxonomy, BIOL 473, 4 credits
C. Populations-a study of the interaction of organisms with each other, with the external environment, and the changes that occur through time.

Conservation Biology, BIOL 379, 4 credits
Marine Biology, BIOL 384, 4 credits
Entomology, BIOL 386, 4 credits
Evolutionary Biology, BIOL 445, 4 credits
The Southern California Flora: Ecology, Evolution and Taxonomy, BIOL 473, 4 credits
Advanced Field Studies, BIOL 485, 4 credits
Herpetology, BIOL 360, 4 credits
5. Completion of CHEM 110A,B and one year of college mathematics. For majors seriously considering graduate or professional schools, Organic Chemistry, Biochemistry, Physics, and Calculus are imperative (these courses are required by many graduate and professional schools).

## GUIDELINES FOR A MINOR IN BIOLOGY

Sixteen credits of core courses, BIOL 151, BIOL 152, BIOL 251, BIOL 252, and at least one additional course at the 300 -level or above.

## COURSE DESCRIPTIONS (BIOL)

## 100 General Biology

An introductory laboratory science course that concentrates on basic scientific investigation, with a particular emphasis on living organisms, some dissections required. One semester, 4 credits.

## 115* Animal Behavior

Diverse types of behavior exhibited by animals, various animals including arachnids and reptiles will be utilized in laboratories. Lectures and laboratories. One semester, 3 credits.

## 135* The Natural History of Southern California

A study of the flora and fauna of Southern California plant communities. Field trips will include desert, chaparral, coastal sage, dune and beach, forest and mountain communities. Lectures, laboratories and field trips. One semester, 4 credits.

## 151 Cell and Molecular Biology

An introduction to the structure and function of cells. Emphasis will be on how molecules are organized within cells to allow for energy production, synthesis of new materials, communication with other cells, replication of genetic information, and reproduction. The laboratory will introduce many ways of studying cells and molecules, including various forms of microscopy and basic recombinant DNA techniques. One semester, 4 credits.

## 152 The Biology of Organisms

An introduction to the structure and function of the organism as a whole. The course provides an introduction to the origin and diversity of life, and discusses the central problems that all organisms, both plants and animals, must solve to survive in different environments. Problems to be examined include feeding strategies, gas exchange, water balance, waste disposal, circulation, thermoregulation, dealing with gravity, and locomotion. Lectures and laboratories. Prerequisite: 151 . One semester, 4 credits.

## 251 Ecology and Evolution of Organisms

An introduction to the structure and function of populations of plants and animals. Topics to be covered include growth and behavior of populations, ecology of communities, ecosystem function, transmission genetics,
and the evolution of populations and species.. Lectures, laboratories, and field trips. Prerequisite: 152 or Environmental Science 100. Cross- listed with ENVS 251. One semester, 4 credits.

## 252 Research Methods in Biology

The last course of the introductory biology curriculum. In preparation of more advanced biological inquiry, students will review experimental designs, data collection and analysis, perform in-depth literature reviews, and practice scientific writing. The culmination of the course will include a presentation of a detailed research proposal. Lectures and laboratories. Prerequisite: 251. One semester, 4 credits.

## 300 A,B Human Physiology and Anatomy

 A study of the structure and function of the human body. The structure and function of individual body systems will be studied with respect to the integrated whole. Emphasis is placed on how structure relates to function. Select dysfunctions and pathologies will be examined. Laboratory includes detailed dissections. Lectures and laboratories. Two semesters, 4 credits each.
## 331 Immunology

The study of the innate and adaptive immune mechanisms of organisms in response to foreign pathogens. The physiological function of the immune system in health and disease is also discussed. Lectures, journal seminars, and laboratory exercises. Prerequisite: 252. One semester, 4 credits.

## 343 Microbiology

The principles of microbial growth, metabolism, morphology, taxonomy, pathogenicity, immunity and control will be discussed. The course emphasizes views on microorganisms as agents of disease and normal inhabitants of man's environment. The laboratory will deal with techniques of isolation, cultivation and identification of these organisms. Prerequisite: 252. One semester, 4 credits.

## 345 Comparative Vertebrate Anatomy

A comparative analysis of vertebrate morphology with an emphasis on how form relates to function. Students will trace the evolution of vertebrate characters and examine how morphology may be explained by phylogeny, environmental pressures, ontogeny, and/or individual variation. The laboratory
will involve detailed anatomical study of representative vertebrates with an emphasis on form and function. Lectures and laboratory. Prerequisite: 252 . One semester. 4 credits.

## 360 Herpetology

The ecology, taxonomy, and behavior of amphibians and reptiles. Lectures, laboratories and field work (some dissection required). Prerequisite: 252. January, 4 credits.

## 379* Conservation Biology

Conservation biology deals with the study of preserving biodiversity. Topics to be covered include the effects of habitat fragmentation on populations, reserve design, the effect of fragmentation on levels of diversity, and issues surrounding the problem of maintaining genetic diversity. Lectures and field work. Prerequisite: 251 or ENVS 100. Cross-listed with ENVS 379. One semester, 4 credits.

## 380* Cell Physiology

Biochemical approach to the understanding of cellular functions with emphasis on the interactions of biochemical pathways and their importance. Lectures and seminars. Prerequisite: 252. One semester, 4 credits.

## 381 Molecular Genetics

In-depth study of how genetic information is stored and utilized by cells, including DNA replication, transcription and translation, and the control of gene expression. Emphasis will be split between prokaryotic and eukaryotic cells. Prerequisite: 151. One semester, 4 credits.

## 384* Marine Biology

The physical, chemical, and biological aspects of the marine environment; emphasizes factors affecting the distribution and abundance of marine organisms. Prerequisite: 252 . One semester, 4 credits. Cross listed with ENVS 384.

## 386* Entomology

Morphology, physiology, ecology, and the behavior of insects. Taxonomy and collection of the common insect families is emphasized. Lectures, laboratories and field work (some dissection required). Prerequisite: 252 . One semester, 4 credits.

## 404 Developmental Biology

The processes that allow a single cell to develop into an entire organism will be explored. Topics will include classical embryology, control of development at the
cellular and molecular level, and mechanisms of differentiation. Extensive laboratory work included. Prerequisite: 252. January, 4 credits.

## 407 Animal Histology

Study of the structure and function of animal tissue. Comparisons of normal and pathological tissues are made. Lectures and laboratory. Prerequisite: 252 . One semester, 4 credits.

## 428* Animal Physiology

Investigation of how animals function in their environment. This course will compare the major physiological systems in vertebrates and discuss adaptations to these systems that allow animals to thrive under diverse environmental conditions. Lectures and laboratories.
Prerequisite: 252. One semester, 4 credits.

## 445* Evolutionary Biology

Examination of the mechanisms of micro evolutionary and macro evolutionary change. Lecture and laboratory. Permission. Prerequisite: 251. Cross-listed with ENVS 445. One semester, 4 credits.

## 473* The Southern California Flora: Ecology, Evolution and Taxonomy

Taxonomic and ecological study of native plants. Lectures, laboratory, and field work. Permission. Prerequisite: 251 or ENVS 100. Cross-listed with ENVS 473. One semester, 4 credits.

## 485 Advanced Field Studies

Variable Credits. Permission.

## 190, 290, 390, 490 Selected Topics in Biology

Variable credits. Permission. May be repeated for credit.

## 493 Seminar

Discussion of current biological research. May include student oral presentations. Time arranged. Permission. May be repeated for credit. One semester, 1 credit.

295, 395, 495 Independent Study
Variable credits. Permission. May be repeated for credit.

496 Undergraduate Research
Variable credits. Permission. May be repeated for credit.
*Not offered every year.

# BUSINESS ADMINISTRATION 

David W. Crain

Jeffrey N. Decker

## Daniel F. Duran

Charles R. Laine, Chair, The John A. Murdy Chair in Business Administration
Milica Milosavljevic
John H. Neu, affiliate
Lana S. Nino

$\tau$B.A. in Business Administration develops, in a liberal arts environment, the student's conceptual knowledge and professional management skills necessary for success in the ever-changing business environment. The specific aim of the program is to prepare students for management and staff positions in profit-oriented and non-profit organizations. The major provides a broad overview of the various sub-disciplines within business administration. For business administration majors wishing to receive more in-depth knowledge in one of the functional areas of business, the Department offers the opportunity to pursue a concentration in each of the following: accounting, finance, international business, management, and marketing. The Department also participates in the Mathematics-Business interdisciplinary major. The Department highly recommends study abroad, and participates in several international programs, including the Denmark International Studies International Business program wherein students study in Copenhagen for one semester.

## GUIDELINES FOR A MAJOR IN BUSINESS ADMINISTRATION

A minimum of 36 credits in Business Administration, of which 24 credits must be at the 300 level or above.

Courses Required:
Business and Society, BSAD 130, 3 credits
Principles of Financial Accounting, BSAD 201, 3 credits
Principles of Managerial Accounting, BSAD 202, 3 credits
Business Law, BSAD 231, 3 credits
Business Finance I, BSAD 310, 3 credits
Marketing Principles, BSAD 320, 3 credits
Management and Organizational Behavior, BSAD 330, 3 credits
Management Information Systems, BSAD 341, 3 credits
Operations Management, BSAD 342, 3 credits
Management Strategy and Policy, BSAD 489, 3 credits

## Choice of either:

Six credits of upper-division electives in Business Administration, or for students choosing to earn an optional concentration in Accounting, Finance, International Business, Management or Marketing: Nine credits in the chosen area of concentration beyond those required courses specified above. These courses must be selected with the department's approval, with at least six credits being 300-level or 400-level BSAD courses. If appropriate, one of the three courses may be a BSAD course below the 300 level or a non-BSAD course.

Statistics, MATH 80, 3 credits
Choice of either:
Mathematics for the Management Sciences, MATH 81, 3 credits or
Integrated Precalculus/Calculus, MATH 139A,B, 7 credits or
Calculus and Analytic Geometry I, MATH 141A, 4 credits
Principles of Economics, Macroeconomics, ECON 200, 3 credits
Principles of Economics, Microeconomics, ECON 201, 3 credits
One upper-division economics course
Why Read?, ENGL 120, 3 credits
Essentials of Public Speaking, THEA 101, 3 credits
One course in ethics highly recommended
Study abroad is also highly recommended

## GUIDELINES FOR A MINOR IN BUSINESS ADMINISTRATION

A minor in Business Administration requires 21 credits, including 201, 202, 231, 310, 320, 330 and one other upper-division course.

## COURSE DESCRIPTIONS (BSAD)

## 130 Business and Society

An introduction to business and management in America. The central focus is on the interrelationships of technological, economic, political, and social forces within business enterprises and on management's ethical obligations to owners, employees, consumers, and society at large. One semester, 3 credits.

## 231 Business Law

The law of contracts, agency, and business structures; sales contracts, negotiable instruments, and secured transactions. Analysis of selected real property, tort, and bankruptcy problems. One semester, 3 credits.

## 240* Business Applications with Computers

The course teaches the basics of computers and computer programs through many exercises with real-world business applications. It is designed for novice users as well as advanced
users who wish to apply their skills in problem solving. The course covers a variety of business functions and includes model building and numerical analysis. Students will learn analytical problem solving skills and apply them to hands-on projects. Prerequisite: 130 or permission. January, 4 credits.

## 335 Leadership Practicum

This course helps students develop their leadership skills through positions in the Business Leadership Group, the SIFE (Students in Free Enterprise) Chapter, and the Rotaract Club. Students develop and demonstrate leadership skills by planning and carrying out business and community related meetings and events both on and off campus. 0-1 credits. May be repeated for credit one time, and subsequently for zero credits.

## 341 Management Information Systems

 General systems concepts; past, present, and future development of information technologies; procedures and examples ofinformation systems building. Emphasis on applications of information systems and current trends in Information Technology and their interactions with other management functions. Prerequisite: 130. One semester, 3 credits.

## 342 Operations Management

Overview of operations and services management. Concepts and applications of operations management in service and manufacturing. Focus on assessing and improving operations for profit and not-forprofit firms, problem-solving skills, handson practice, value-driven approach, quality management, and customer satisfaction. Prerequisites: 130, MATH 80 and either MATH $81,139 \mathrm{~A}, \mathrm{~B}$ or 141A. One semester, 3 credits.

## 392 Business Internship

Internship in business setting under joint college/site planning and supervision; helps student apply and assess business management theory, individual skills, and personal values in a corporate setting. Eight hours per week at site. Required weekly seminar. Permission. Junior standing required. One semester, 1-3 credits.

## ACCOUNTING COURSES

## 201 Principles of Financial Accounting

Introduces financial accounting. Emphasizes measuring, reporting, and analyzing financial activity. Covers the accounting cycle, accounting for assets, liabilities, equity, revenues, expenses, and financial statements. Prerequisites: 130, and either MATH 076 or sufficient math placement score. One semester, 3 credits.

## 202 Principles of Managerial Accounting

 Continues 201 and introduces managerial accounting. Covers financial statement analysis, managerial/cost concepts, job-order and process costing, CVP relationships, and budgeting. Prerequisite: 201. One semester, 3 credits.
## 301* Intermediate Accounting

This course provides students a more advanced study of accounting theory. Examines theoretical foundations of corporate financial planning and reporting. Discussed GAAP relating to the conceptual framework of financial reporting, asset valuation, and financial statement preparation. Prerequisites: BSAD 201 and 202. One semester, 3 credits.

## 307* Federal Tax Accounting

Fundamentals of federal income taxation; emphasis on taxation of individual income. Prerequisite: 201. One semester, 3 credits.

## 308* Accounting Information for Decision Making

The course emphasizes financial literacy at the managerial level. Based on intermediate accounting principles, the course teaches students to analyze company financial data including management reports and quarterly and annual reports. Prerequisite: 201. One semester, 3 credits.

## 309* Accounting Information Systems.

The course promotes accounting efficiency, audit trail of accounting systems, and simplicity and transparency that managers and decision-makers expect when using accounting systems. Students will use Access database software to reinforce accounting system design principles. Prerequisite: 201. One semester, 3 credits.

## FINANCE COURSES

## 212 Financial Institutions

The role of financial institutions in our nation's financial markets and the economy; analysis of various types of financial institutions with an emphasis on differentiating functions and practices. Some field trips and guest speakers. Prerequisite: 130 or permission. January, 4 credits.

## 310 Business Finance I

Introduction to financial management, its concepts, and institutions; time value of money; bond and stock valuation; risk; financial statement analysis and financial forecasting; capital budgeting; long-term financing decisions; working capital management. Prerequisite: 201. Recommended: 202, MATH 80 and either MATH 81, 139A,B, or 141A. One semester, 3 credits.

## 411* Business Finance II

Case studies of topics from 310; study of additional topics such as a dividend policy, mergers, leasing, and multinational financial management using text material and case studies. Students will learn how to use electronic spreadsheets in analyzing financial problems. Prerequisite: 310. One semester, 3 credits.

## 413* Principles of Investments

Securities markets and theories of market behavior; securities and portfolio analyses, investment strategies. Prerequisite: 310 or permission. One semester, 3 credits.

## INTERNATIONAL BUSINESS

## 333 Managing Multinational Corporations

Establishing and managing international business operations under widely fluctuating economic and socio-political conditions. Team projects and case analysis, field visits (typically to Mexico), and guest lectures supplement a rigorous analysis of this subject. Prerequisite: 130 or permission. January, 4 credits.

## 343* E-Commerce Business Plans

This course focuses on developing an e-commerce international business plan and considers the delivery of product and services in the international arena via e-commerce distribution channels that can provide a competitive edge. Prerequisite: 130 or permission. One semester, 3 credits.

## 350 International Business

An introduction to all facets of international business. Team projects, case studies, and class discussion explore the economic framework of international business; the environmental, operational, and strategic aspects of international business and the social responsibility and future of international business. Prerequisite: 130 or permission. One semester, 3 credits.

## 423* International Marketing

Product and service mix in international marketing, promotional alternatives; distribution systems; pricing policies; and special opportunities and problems caused by cultural, social, political, and other environmental variables. Team Projects. Prerequisites: 320 and 350. One semester, 3 credits.

## MANAGEMENT COURSES

## 330 Management and Organizational Behavior

The systematic study of individual, group, and organizational behaviors and processes. The analyses of these levels of organizational
functioning are aimed at enhancing personal and group effectiveness. Topics include motivation, leadership, power, cooperation, decision-making, and organizational change. Prerequisite: 130 or junior standing. One semester, 3 credits.

## 332* Leadership Challenges of the 21st Century

An advanced course in leadership designed to explore in depth issues of power, influence, and leadership styles and practices. Types of leadership particular to different historical periods, different industries, and different economic and business challenges will be explored. Issues such as the relationship between leaders and followers, the influence of gender on leadership style, and the characteristics of entrepreneurial leaders, corporate leaders, and union leaders will be addressed. Particular emphases for the course will be selected each time the course is offered. One semester or January, 3 or 4 credits.

## 333 Managing Multinational Corporations

(See International Business Section).

## 431* Human Resources Management

Selection, staffing, remuneration, labor relations, training, and development of human resources in organizational environments such as business, government, and education. Prerequisite: 330 or permission. One semester, 3 credits.

## 435* Leading and Growing the Small Business

Application of management theory and concepts in the context of a new business, its preparation, launch, and early stages of growth. Consideration is given to challenges confronting a new business including aspects of finance, marketing, and recruitment/ retention of human resources. Prerequisites: 201, 330. One semester, 3 credits.

## 489 Management Strategy and Policy

 Integration of underlying concepts in marketing, personnel, finance, production, and other business functions; analysis of strategies and operating environments, including ethical concerns; case study and seminar discussion. Prerequisite: Senior standing in BSAD. One semester, 3 credits.
## MARKETING COURSES

## 320 Marketing Principles

An overview course designed to develop an understanding of the role and processes of marketing in contemporary society and a managerial viewpoint in setting marketing strategy and tactics of the firm. Prerequisite: 130 or junior standing. One semester, 3 credits.

## 422* Consumer Behavior

Theories of consumer behavior and applications to marketing strategy and tactics. Psychological, social, economic, and cultural factors influencing consumption are examined. Prerequisite: 320. One semester, 3 credits.

423* International Marketing (See International Business section).

425* Integrated Marketing Communications Strategic management of advertising, personal selling, sales promotion, public relations, and aspects of guerilla marketing and product placement. Prerequisite: 320. One semester, 3 credits.

## Additional Offerings

190, 290, 390, 490 Selected Topics in Business Administration
Variable credits. Permission. May be repeated for credit.

295, 395, 495 Independent Studies
Credit and time arranged. Permission. May be repeated for credit.
*Not offered every year.

Priscilla B. Bell

Devin S. Iimoto, Chair

Ralph A. Isovitsch

Amy C. Moskun
Charles F. Reeg

stbefield of chemistry is concerned with the composition, properties, structures, and transformations of natural and synthetic substances. The chemistry curriculum provides instruction for students who plan to pursue graduate studies in chemistry, biochemistry, and related areas; who plan to enter medical and dental schools and other allied health fields; who will seek employment in industry or government; or who want to teach in the science programs of secondary schools. The Department also offers courses in support of other Whittier College science programs as well as courses for students who wish to acquire or strengthen a background in chemistry, but who do not plan a career in science.
The Chemistry Department is approved by the Committee on the Professional Training of Chemists of the American Chemical Society. Students majoring in chemistry who follow the ACS-approved program receive certification as being prepared for a career in chemistry or for graduate study in the field.

## GUIDELINES FOR A MAJOR IN CHEMISTRY

Core courses for all three options:
General Chemistry, CHEM 110A,B, 8 credits
Quantitative Analysis, CHEM 220A,B, 5 credits
Organic Chemistry, CHEM 231A,B, 6 credits
Organic Chemistry Laboratory, CHEM 233A,B, 2 credits
Physical Chemistry, CHEM 321A, 4 credits
Seminar, CHEM 491, 2 credits
Integrated Laboratory, CHEM 486, 3 credits
Calculus and Analytical Geometry I,II, MATH 141A,B, 8 credits or
Integrated Pre-Calculus/Calculus I,II, Math 139 A,B, 7 credits and
Math 141B, 4 credits
College Physics I, II, PHYS 135A, B , 8 credits
or
Introductory Kinematics and Mechanics, Introductory Electricity, Magnetism, and Thermodynamics, PHYS 150, 180, 9 credits

## I Major in Chemistry

A minimum of 36 chemistry credits.
Choice of 6 additional chemistry credits ( 300 level or above).

## II Major in Biochemistry

A minimum of 41 chemistry credits.
Biochemistry, CHEM 471A,B, 6 credits
Biochemistry Laboratory, CHEM 472, 1 credit
Advanced Biochemistry Laboratory, CHEM 473, 1 credit
Biophysical Chemistry, CHEM 480, 3 credits
Cell and Molecular Biology, BIOL 151, 4 credits
Molecular Genetics, BIOL 381, 4 credits
And choice of one:
Microbiology, BIOL 343, 4 credits or
Immunology, BIOL 331, 4 credits or
Developmental Biology, BIOL 404, 4 credits

## III Major in Chemistry with ACS Certification

A minimum of 47 chemistry credits.
Biochemistry, CHEM 471A, 3 credits
Physical Chemistry, CHEM 321B, 2 credits
Physical Chemistry Laboratory, CHEM 325, 1 credit
Instrumental Analysis, CHEM 442, 4 credits
Advanced Inorganic Chemistry, CHEM 452, 4 credits
Choice of three additional 400 level chemistry credits. Study of a foreign language, although not required, is highly recommended, particularly for students who plan to pursue graduate studies in chemistry.
CHEM 85 and 95 may not be applied toward a major in Chemistry.

## GUIDELINES FOR A MINOR IN CHEMISTRY

A minor in chemistry requires 21 credits: 110A,B; 220A, B; 231A,B; 233A,B.
NOTE: All laboratory courses require a laboratory fee.

## COURSE DESCRIPTIONS (CHEM)

## 85* Introduction to Chemistry

Survey of the principles of chemistry taught in the context of environmental and/or other contemporary issues. Topics include chemical formulas, atomic structure, bonding, chemical reactions and stoichiometry. Laboratories involve hands-on experience with collecting and analyzing data as well as some elements of laboratory method design. One semester, 4 credits.

## 95 Preparation for General Chemistry

Scientific measurements, matter, elements and compounds, the periodic table, nomenclature, chemical formulas and equations, stoichiometry, oxidation-reduction, gas laws, and solutions are covered. Problem-solving techniques are stressed. Prerequisite: Eligible to take Math 85 . One semester, 3 credits.

## 110 A,B General Chemistry

Lecture and laboratory work covering the fundamental principles of chemistry, states of matter, chemical bonding, ionic theory, kinetics, equilibria, thermodynamics, electrochemistry, and descriptive chemistry of metals and non-metals. Laboratory work also includes qualitative analysis and elementary quantitative analysis. Prerequisites: one semester of college math, sufficient score on math proficiency exam, or permission. Two semesters, 4 credits each.

## 220A,B Quantitative Analysis

Lecture ( 2 credits in the Fall) and laboratory (3 Credits in January) covers elementary statistics and sampling, fundamentals of volumetric analysis and several instrumental methods. Electrochemistry, gas and liquid chromatography, and spectrophotometry will be introduced. Desirable preparation for all further work in chemistry. Prerequisite: 110B, 5 credits.

## 231 A,B Organic Chemistry

Investigation of the fundamental principles of organic chemistry. This course focuses on understanding organic chemistry through chemical mechanisms, stereochemical principles and diverse functional reactivity. Prerequisite: 110B. Corequisite: 233. Two semesters, 3 credits each.

## 233 A,B Organic Chemistry Laboratory

Project oriented class focusing on problem solving within the organic chemistry laboratory. An integrated introduction to laboratory skills, techniques, instrumentation and chemical reactivity. Prerequisite: 110B. Corequisite: 231 . Two semesters, 1 credit each.

## 282* Environmental Chemistry

Atmospheric and condensed phase chemistry involved in modern environmental challenges including global warming, air and water pollution, and ozone depletion. Prerequisite: 110A. One semester, 4 credits cross listed, ENVS 320.

## 321 A,B* Physical Chemistry

Chemical thermodynamics; kinetic theory and chemical kinetics; quantum concepts and their applications to spectroscopy and the structure of matter. Prerequisites: 220B, 231B, PHYS 135 AB or PHYS 150 and 180, MATH 141B, or permission. Two semesters, 4 credits for $A, 2$ credits for $B$.

325*, 326* Physical Chemistry Laboratory Precise determination of physical-chemical properties of various systems by classical and modern techniques. Prerequisite: 321A or B. Two semesters, 1 credit each.

## 431* Advanced Organic Chemistry

Detailed investigation into the subspecialties of organic chemistry. This course focuses on understanding physical organic, synthetic organic, bio-organic, industrial and basic pharmacological chemistry. A strong emphasis is placed on current literature, development of problem solving skills and integration of practicality and theory. Prerequisite: 231 B and 321A. One semester, 3 credits.

## 433* Advanced Organic Chemistry Laboratory

Project-based investigation of organic laboratory skills, techniques, procedures and instrumental analysis. Through literature review and laboratory implementation, students investigate procedures and logical extensions of organic chemistry research projects. Prerequisite: 233B. One semester, 1 credit.

## 442* Instrumental Analysis

Operating principles and applications of instrumental methods of analysis including atomic absorption, UV-visible, fluorescence, IR, Raman, NMR and mass spectrometry. Prerequisite: 220A, B. One semester, 4 credits.

## 452* Advanced Inorganic Chemistry

Study of structure and reactivity of coordination and organometallic compounds; emphasis on bonding, symmetry and catalytic properties; laboratory emphasizes inorganic synthesis, reactivity and determination of structure. Prerequisite: 321B or permission. One semester, 4 credits.

## 471 A,B Biochemistry

The structure and function of compounds in living systems. 471 A covers proteins and nucleic acids and integrates them in catalysis and protein synthesis. 471B covers carbohydrates and lipids and integrates them into the study of biological membranes and cellular metabolism. Prerequisite: 231B or permission. Two semesters, 3 credits each.

## 472 Biochemistry Laboratory

General biochemical techniques involving protein purification and enzyme catalysis. Prerequisites: 233B and concurrent enrollment in 471A. One semester, 1 credit.

473* Advanced Biochemistry Laboratory
General biochemical techniques including nucleic acids and protein detection. Prerequisite: 472 . One semester, 1 credit.

## 480* Biophysical Chemistry

Thermodynamics, equilibria, biopolymers, kinetics, transport processes, and spectroscopy of biochemical systems. Prerequisites: 471A, MATH 141B, or permission. One semester, 3 credits.

## 486 Integrated Laboratory

Laboratory/instrument intensive course designed to integrate the different disciplines of chemistry. The labs will be designed for some method design and development, data collection and analysis. The final project will involve a self-designed project that was proposed and developed in the CHEM 491 Seminar. Prerequisites: 233B, 321A, and 491. January, 3 credits.

190, 290, 390, 490* Selected Topics in Chemistry
Variable credits. Permission. May be repeated for credit.

## 491 Seminar

A novel research project is developed and a proposal written and presented. Students are further trained in giving oral presentations on topics that lead to the development of their proposal. One semester, 2 credits.

## 295, 395495 Independent Studies

Credit and time arranged. Permission. May be repeated for credit.

## 496 Research

Individual research projects in selected areas of chemistry under the supervision of a faculty member. Permission from a chemistry faculty member. May be repeated for credit. One semester, variable credits.
*Not offered every year.

# COLLEGE WRITING PROGRAMS 

## Charles Eastman, Director of College Writing Programs

Clyhittier's curriculum is writing-intensive, designed to teach students how to communicate effectively at each successive level of their major discipline, as well as to general audiences outside their chosen fields. Students begin with Freshman Writing Seminars, progress to Writing Intensive Courses, proceed through Writing Across the Curriculum, and write a capstone Paper-in-the-Major as part of their senior year experience.
Peer tutoring is offered through the Center for Academic Success. Students interested in teaching careers are encouraged to take INTD 33, the required training class, and work at the Center.

## THE FRESHMAN WRITING PROGRAM

Freshman Writing Seminars introduce students to Whittier's writing program. These seminars, themed courses designed by faculty from all disciplines, delve into challenging intellectual questions which freshmen explore in class discussions and in essays. Freshmen develop both critical thinking skills and the ability to communicate their conclusions about complex problems in clearly written form. Seminars are limited to 15 students and differ in content each year. Each seminar is 3 units and is taken for a letter grade.

## INTD 100: College Writing Seminars

Students read complex texts chosen to sharpen critical reading and thinking skills. Texts frame a central course theme. Writing assignments based on these texts are designed to teach and practice description, narration, exposition, argument, analysis, synthesis, and research-based writing, as well as writing under pressure of time. Extensive revision is emphasized as integral to the writing process. One semester, three credits.

## Examples of the 23 College Writing Seminars offered in Fall 2008:

!Beisbol! (Professor Rafael Chabran)
Students read complex texts chosen to sharpen students' critical reading and thinking skills. Texts frame a central course theme. Writing assignments based on these texts are designed to teach and practice persuasion, description, narration, exposition, and research-based writing, as well as writing under pressure of time. Extensive revision is emphasized.

## Shining City upon a Hill: Utopias in the Visual Arts (Professor Jenny Herrick)

This class will explore a variety of these utopic (and arguably dystopic) projects and propositions through a study of the drawings, architecture, urban planning, and photographs that have defined and documented them. Among the works we will explore are the 60s and 70s English architectural magazine "Archigram", the Disney
developed, pre-planned community of Celebration, Florida, and Joel Sternfeld's 2005 photo documentary project "Sweet Earth".

## "The Great Mortality": The Bubonic Plague in Art and Science" (Professor Charles Eastman)

Early in the 12 th century C.E., a pandemic began to spread westward from Central China. It would eventually reach as far west as Iceland and by 1400 it had reduced the population of Western Europe by as much as $50 \%$ and reduced the world population by as much as 100 million people (at a time when the total world population was estimated at 450 million people). The pandemic became known variously as The "Great Mortality," the "Black Death," and the "Black Plague." It has assumed a permanent place of significance in the cultural imagination of the west, spawning countless works of art and literature as well as entrenching itself in our vocabularies. For centuries it was assumed from study of contemporary accounts that the disease responsible for this "Great Mortality" was yersinia pestis, or bubonic plague, but recent medical research has opened some doubt as to whether or not these bacteria could have been the lone culprit.

## Peaceful Paths: Nonviolent Political and Social Movements (Professor Deborah Norden)

From the New York Times to the Wall Street Journal, from Fox news to CNN, the headlines these days are filled with political violence. Whether seeking to oust their own governments, coerce leaders to adopt policy changes, or expel foreign forces, people everywhere seem to pursue political change through violence. Yet, looking more closely, we can also find news coverage of Burmese monks peacefully demanding an end to political repression, or immigrant rights marches in Los Angeles. This course explores different nonviolent efforts to achieve major political and social change, both within and beyond the United States. Some of the greatest world leaders, including Mahatma Gandhi and Martin Luther King, Jr., deliberately confronted their government's rules or their society's practices with peaceful movements. But can nonviolence work? Can protests, demonstrations, artistic expressions and-the central tool of this class-words replace such weapons?

## "Just a Girl" Contemporary Women Writers (Professor Andrea Rehn)

As Gwen Stefani reminds us, it's complicated to be "just a girl (in the world)." What can literature tell us about women's struggles to define themselves? How do such redefinitions affect men? How do these questions influence how we write and what we write about? What is feminism? We will read novels, poems and essays that address these questions from a variety of feminist perspectives. Writing assignments will include personal and argumentative essays which will be crafted through a series of peer reviews and revisions. Authors may include Sandra Cisneros, Jamaica Kincaid, Arundhati Roy, Toni Morrison, and Adrienne Rich.

## Scientific Views on Religion (Professor Hector Valenzuela)

There are many features that make Homo sapiens a unique species. Religion may be the most baffling feature to explain. Religion can be discussed from various
disciplines' perspectives, but all can agree that religion consumes a large amount of our time and resources and is extremely widespread in every society. Disciplines ranging from biology to economics have tried to "explain" religion and although much remains to be done some interesting data is beginning to be generated. This course is intended to look at new and old literature that addresses the relationship between science and religion with a focus on how science tries to explain religion. Another way of looking at this course is as a manifestation of the growing tendency of science to poke its nose into God's business

## INTD 90: Introduction to College Writing

Students learn critical reading skills for college level texts. These texts serve as bases for assignments teaching fundamental college writing skills: thesis development, organization of ideas, basic exposition and argumentation, and mechanics. Each student learns to develop an effective writing process. One semester, three credits.

## An example of the INTD 90 classes offered in Fall 2004:

Rites of Passage: Coming of Age in Diverse Environments.
This writing class will explore the paradigm of coming of age and attaining one's role in society as represented in major texts from writers of diverse identities and environments. We will focus on the personal essay and growing-up stories in coming of age fiction and films. Both fiction and films confront issues of assimilation amid the confusion and anger that often results from growing up and being from a different ethnic or otherwise diverse group in a country where ethnicity and diversity are not always prized. The multiple exposures made possible by this multicultural approach should deepen your sense as students of your own historical moment and the ways in which these issues have been framed, both in the past and in other cultures.

## WRITING INTENSIVE COURSES

Writing Intensive Courses continue students' development as writers by emphasizing writing and revision in the context of specific disciplines. Students write at least one longer paper to emphasize the importance of applying information and interpretations gleaned from research or textual analysis. Research paper assignments focus on using information and interpretations to present a case, rather than simply to catalogue information. Papers emphasizing analysis of textual materials involve comparison and synthesis of ideas presented in sources read. Each student must complete a Writing Intensive Course by the end of the first semester of the sophomore year. The Writing Intensive Course may be taken within or outside the major; it may simultaneously satisfy other Liberal Education Program requirements. Courses satisfying the Writing Intensive requirement in 2007-8 include: "Why Read?"; "Introduction to Ethics"; "Animal Behavior"; "Race, Class and Gender"; and, "The Life and Teachings of Jesus."

## WRITING ACROSS THE CURRICULUM

Writing to communicate understanding of core concepts is the primary mode of assessment in both lower and upper division courses at Whittier, including mathematics and science, in both the Whittier Scholars Program and the Liberal Education Program. In their majors, students learn not only to master written modes of discourse typical of their discipline, but also how to "translate" complex disciplinary information to general audiences.

## PAPER-IN-THE-MAJOR

The capstone writing experience in Whittier's curriculum is the Paper-in-the-Major. Researched and written in the senior year (occasionally in the junior year), this paper demonstrates students' command of their major's perspectives, methods, and body of knowledge, as well as their ability to communicate these skillfully in writing. The Paper-in-the-Major can serve as a writing sample in applications to graduate programs. Specific topics and formats for the Paper-in-the-Major are determined by the faculty in each department.

## THE CAMPUS WRITING CENTER AND THE PEER MENTOR PROGRAM

Students interested in teaching careers should consider applying to and training for work as peer tutors at the Center for Academic Success. Students may also apply to work in partnership with faculty teaching Freshman Writing Seminars as peer mentors to incoming freshmen. See the Director of College Writing Programs for information about these programs.

Charles R. Laine, Affiliate<br>Simon J. Lamar<br>Geetha Rajaram<br>Gregory R. Woirol, Chair, The Douglas W. Ferguson Professor of Economics and Business Administration

Economics is the social science concerned about the practices, institutions, and customs societies have developed to produce and distribute goods and services. It employs a logical and ordered approach to understanding how economies work and how to deal with pressing social issues and problems. In encouraging an appreciation of the way in which economists think about and approach issues, the study of economics is rewarding in itself and is an excellent background for a wide variety of careers, including law, business, and government. The program is designed to provide a rigorous course of study for those interested in pursuing graduate work in economics.

## GUIDELINES FOR A MAJOR IN ECONOMICS

A minimum of 30 credits, of which 24 must be at the 300 level or above. There are three options leading to a degree in economics: General Distributive (for students with professional interests in areas such as law, government, and secondary education); Business Economics (for students intending to pursue the MBA or other business-oriented programs); and Pre-Professional Economics (for students planning graduate work in economics).

## General Distributive Option:

Principles of Economics: Macroeconomics, ECON 200, 3 credits
Principles of Economics: Microeconomics, ECON 201, 3 credits
Intermediate Macroeconomic Theory, ECON 300, 4 credits
Intermediate Microeconomic Theory, ECON 301, 4 credits
Senior Project I, II, ECON 400A, B, 4 credits (paper in the major)
Statistics, MATH 80, 3 credits
Essentials of Public Speaking, THEA 101, 3 credits
Business Economics Option: All of the courses under the General Distributive Option, plus:

Managerial Economics, ECON 365, 3 credits
Principles of Financial Accounting, BSAD 201, 3 credits
Principles of Managerial Accounting, BSAD 202, 3 credits
Two other Business Administration courses appropriate to this option. Choice of one:

Mathematics for the Management Sciences, MATH 81, 3 credits
Calculus and Analytic Geometry, MATH 141A, 4 credits
Integrated Precalculus/Calculus, MATH 139A, B, 7 credits

Pre-Professional Economics Option: All of the courses under the General Distributive Option, plus:

Introduction to Econometrics, ECON 305, 4 credits
History of Economic Thought, ECON 315, 3 credits
Calculus and Analytic Geometry, I, II, MATH 141A, B, 8 credits

## GUIDELINES FOR A MINOR IN ECONOMICS

A minor in economics requires 20 credits, including 200, 201, 300, 301, and six additional economics credits at the 300 level or above.

## COURSE DESCRIPTIONS (ECON)

## BASIC ECONOMIC ANALYSIS

## 200 Principles of Economics: Macroeconomics

The problem of scarcity; theory of national income and employment; policy applications to problems of employment, inflation and business fluctuations; introduction to money and banking; monetary and fiscal policy. One semester, 3 credits.

## 201 Principles of Economics: Microeconomics

Introduction to the theory of price and wage determination in markets. Includes analysis of consumer choice, decisions by firms, industrial organization, and government policy as it affects markets. Also includes discussion of economic efficiency and income distribution in the market economy. One semester, 3 credits.

## INTERMEDIATE ECONOMIC ANALYSIS

## 300 Intermediate Macroeconomic Theory

Theoretical analysis of forces that determine the general level of prices, output, and employment; monetary and fiscal policy. Determinants of economic growth and introduction to microfoundations of macroeconomics. Prerequisites: 200 and 201. Recommended: At least one of the following, MATH 81, 85, 139A, or 141A. One semester, 4 credits.

## 301 Intermediate Microeconomic Theory

The theory of consumer behavior and of the firm under perfect and imperfect competition; resource pricing; general equilibrium and welfare economics. Prerequisites: 200 and 201. Recommended: At least one of the following, MATH 81, 85, 139A, or 141A. One semester, 4 credits.

## 305* Introduction to Econometrics

An introduction to the mathematical and statistical tools used to model, test, and forecast economic relationships. Construction of models, data collection, linear regression, hypothesis testing, and forecasting. Introduction to computer software used for regression analysis. Prerequisites: 200, 201 and MATH 80. One semester, 4 credits.

## 310* Money and Banking

An examination of the institutional structure of the U.S. financial system, including the scope and effect of bank deregulation; the instruments and theoretical impact of Federal Reserve System monetary policy on the domestic and international economy. Prerequisite: 200. One semester, 3 credits.

## 315* History of Economic Thought

The evolution of economic ideas; concentration on major schools of thought, economists, and their ideas since 1750. Prerequisites: 200 and 201. One semester, 3 credits.

## APPLIED ECONOMIC ANALYSIS

## 345* Public Sector Economics

The role of government in a market economy, the economics of public expenditures and taxation; policy issues. Prerequisites: 200 and 201. One semester, 3 credits.

## 347 Economics of War

An introduction to war economics. A study of the relation between economics, warfare, and national defense. The first half of the course is devoted to an analysis of the impact of wars at a macroeconomic level; the second half is on the microeconomic aspects of wars. Prerequisites: 200 and 201. January session, 4 credits.

## 350* Labor Economics

This course provides an introduction to the analysis of demand, supply, and equilibrium in the labor market. Examples of questions that will be discussed are how do individuals choose to work or not to work and how many hours do they choose to work. In addition, application of labor theory to issues of compensating wage differentials, human capital, labor unions, incentive pay, immigration labor, and labor market discrimination will be analyzed. Prerequisite: 201. One semester, 3 credits.

## 353 Labor in America

Analysis of changes in labor markets and labor institutions in the past century. Topics include union history, collective bargaining, shifts in aggregate employment patterns, current issues. Prerequisite: 200. January session, 4 credits.

## 357* Economics of Race and Gender

Through the use of economic models, the class explores and analyzes differences in the U.S. labor market related to race, gender, and class. Focus on exploring current trends and policies for remedying inequalities. Prerequisite: 200 or 201. One semester, 3 credits.

## $360^{*}$ Industrial Organization

Application of economic principles to study of structure, conduct, and performance of U.S. industry. Analysis of antitrust and regulation policy in terms of appropriate government response to industrial performance. Prerequisites: 200 and 201. One semester, 3 credits.

## 365* Managerial Economics

Application of economic theory and methodology to managerial decisions. Prerequisites: 200 and 201. Statistics recommended. One semester, 3 credits.

## 370* Economic History

Factors behind European and U.S. economic development; concentration on the U.S. Prerequisite: 200. One semester, 3 credits.

## INTERNATIONAL ECONOMICS

## 380* International Economics

Basic principles of international trade and finance; their application to trade barriers, payment systems, and international organizations; a policy approach. Prerequisites: 200 and 201. One semester, 3 credits.

383* Comparative Economic Systems The evolution and performance of economic systems, including capitalism, market socialism, and centrally planned socialism. Prerequisites: 200 and 201. One semester, 3 credits.

## 386* Growth and Development

Surveys the main economic models of growth and development. Topics include: Why are some countries rich and others poor? Can less developed countries catch up with the income level of the developed world? What are the determinants of economic growth and development? Can growth continue forever? The course addresses policy issues related to poverty, income distribution, structural change, savings, foreign trade. Prerequisites: 200 and 201. One semester, 3 credits.

## ECONOMICS CAPSTONE

## 400A Senior Project I

Senior project for the major. Provides individual guidance by faculty in the selection of a topic, research methodology, and writing of a thesis. In-depth analysis of a self-selected topic, including synthesis of literature, gathering and analyzing data in support of a particular hypothesis. 400A requires students to complete a detailed outline and a literature review. Prerequisite: 300 or 301. Permission required. Fall semester, 1 credit.

## 400B Senior Project II

Senior project for the major. Provides individual guidance by faculty in the selection of a topic, research methodology, and writing of a thesis. In-depth analysis of a self-selected topic, including synthesis of literature, gathering and analyzing data in support of a particular hypothesis. 400B requires students to complete their senior project and to present their work to faculty and students at large. Prerequisite: 300 or 301 . Permission required. January session, 3 credits.

## Additional Offerings

## 190, 290, 390, 490 Selected Topics in Economics

Variable credits. Permission. May be repeated for credit.

## 295, 395, 495 Independent Studies

Credit and time arranged. Permission. May be repeated for credit.
*Not offered every year.

Donald W. Bremme<br>Kathleen S. Ralph, Chair<br>Kay Sanders<br>Anne Sebanc<br>Ivannia Soto-Hinman<br>Shannon M. Stanton<br>Judith T. Wagner

toDepartment offers studies in two distinct fields: education and child development. Education programs lead toward teaching credentials. (California law does not permit students to major in education.) An undergraduate minor in elementary education and a program leading to a Master's Degree are also offered in education. Child Development offers an undergraduate major and minor, leading toward a variety of careers in working with children.

## EDUCATION

Teacher education programs at Whittier College are grounded in a set of guiding principles. Among others, these include commitments to: (1) developing a social constructivist approach toward learning and teaching; (2) valuing diversity and supporting all students' learning; (3) establishing a just, inclusive learning community in and beyond the classroom; (4) nurturing both collaborative and independent inquiry and learning; and (5) growing professionally by continually reflecting on one's practice and pursuing other opportunities for learning.
Whittier College is fully accredited by the California Board of Education and the California Commission on Teacher Credentialing to offer programs leading toward both the Multiple Subject (elementary) Teaching Credential and the Single Subject (secondary) Teaching Credential.

The Multiple Subject and Single Subject teacher education programs enable students to make substantial progress toward their teaching credentials as undergraduates, taking prerequisites during the freshman and sophomore years and required teacher preparation courses during their junior and senior years. Students can then complete their remaining credential requirements as graduate students.
Because California law does not permit majoring in education, credential candidates must also complete departmental or interdisciplinary majors as described in this catalog. Among the appropriate majors for Multiple Subject (elementary) credential candidates are biology, child development, English, history, mathematics, and psychology.
Students should be aware that advancement to Credential Candidate Status and student teaching require a 2.8 minimum GPA in the last 60 graded units of course work, as well as a 3.0 minimum GPA, with no grade less than $\mathrm{B}-$, in the
professional-preparation courses listed as requirements on the next few pages.
The information and requirements listed above are not exhaustive. Additional, important information on all education programs and certification requirements is available in the Department of Education and Child Development. Essential information on admission to and advancement in teaching-credential programs is also available there. Undergraduate students should obtain this information and begin meeting with an education advisor-as soon as they become interested in elementary or secondary teaching. Early advisement is critical to successfully planning a teacher education program.
Post-baccalaureate (graduate) students who meet all prerequisite and entrance requirements can complete all credential and Master's program requirements through evening and summer courses. Procedures and requirements for postbaccalaureate students differ from those for undergraduates. These procedures and requirements are described in separate documents available from the Whittier College Education Department. Post-baccalaureate students should obtain program information and advisement from the Department as early as possible for admission to summer and fall cohorts.
For both undergraduate and graduate students, a grade of B-or above is required in each teacher preparation course in order to enroll in the next course(s) in the teacher-preparation program sequence. When a grade below B- is earned in a course, a student must do the following before enrolling in any other teacher preparation course:

1. Petition the department for permission to retake the course in which a grade below B- was earned, and if permission is granted
2. Retake the course and earn a grade of B-or above.

Petitions take the form of a letter to the Department Chair. The petition may also request permission to proceed with the teacher preparation course sequence before retaking a required course. Such requests are granted only rarely in exceptional cases. More information on petition letters and the petition process is available in the Department of Education and Child Development.

## PREREQUISITES AND PROFESSIONAL PREPARATION REQUIREMENTS FOR TEACHING CREDENTIALS

The teacher education programs for students pursuing the Multiple Subject (elementary) and Single Subject (secondary) Teaching Credentials include planned prerequisites and professional preparation courses. Students should plan their undergraduate programs so as to take the prerequisites during their freshman and sophomore years. Professional preparation requirements are not open to freshmen or sophomores. Students should take the sequence of required professional preparation courses in the junior year and after. The prerequisites and professional preparation courses for the Multiple Subject (elementary) and Single Subject (secondary) Teaching Credentials are listed on the next few pages.

## Prerequisites:

Introduction to Human Development, CHDV 105, 3 credits or
Child Psychology, PSYC 242, 3 credits
Sociological and Anthropological Perspectives on Education, EDUC 300, 3 credits

Movement Education in the Elementary School, KLS 320, 3 credits
Required professional preparation courses:
Teaching Diverse Learners, EDUC 401, 3 credits
Learning and Learners, EDUC 406, 3 credits
Literacy Development in the Elementary School, EDUC 402, 3 credits
Second Language Acquisition and Methodology, EDUC 404, 3 credits
Multiple Subject Curriculum and Pedagogy: Integrating Language Arts, HistorySocial Science, and Visual-Performing Arts, EDUC 405, 3 credits
Multiple Subject Curriculum and Pedagogy: Math and Science, EDUC 407, 3 credits Promoting Students' Health \& Safety, KLS 509, 1 credit

Working with Special Populations I \& II, EDUC 510 \& 511, 1 credit each Student Teaching/Internship, EDUC 520, 12 credits. (To qualify for student teaching or internship, students must have completed all prerequisites and subject matter requirements. Consult Department materials for a complete list.) Professional Development Seminar, EDUC 521, 1-2 credits. (Must be taken concurrently with Student Teaching/Internship.)

## FOR THE PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL:

 Prerequisites:Introduction to Human Development, CHDV 105, 3 credits or Psychology of Adolescence, PSYC 242, 3 credits

Sociological and Anthropological Perspectives on Education, EDUC 300, 3 credits Required professional preparation courses:

Teaching Diverse Learners, EDUC 401, 3 credits
Learning and Learners, EDUC 406, 3 credits
Teaching Content Area Literacy, EDUC 403, 3 credits
Second Language Acquisition and Methodology, EDUC 404, 3 credits
Single Subject Curriculum and Pedagogy I, EDUC 408, 3 credits
Single Subject Curriculum and Pedagogy II, EDUC 409, 3 credits
Promoting Students' Health \& Safety, KLS 509, 1 credit
Working with Special Populations I \& II, EDUC 510 \& 511, 1 credit each
Student Teaching/Internship, EDUC 520, 12 credits. (To qualify for student teaching or internship, students must have completed all prerequisites and subject matter requirements. Consult Department materials for a complete list.) Professional Development Seminar, EDUC 521, 1-2 credits. (Must be taken concurrently with Student Teaching/Internship.)

A minor in elementary education requires 20-21 credits, including CHDV 105, CHDV 315 or 330, EDUC 401, 402, 404, 406, and one additional course from an approved list.

## EDUCATION COURSE DESCRIPTIONS (EDUC)

## 67 Experiences in Education

Provides students interested in teaching or other education careers with relevant experiences in classrooms or other field settings. Minimum of 26 hours of field experience required. One semester, 1 credit.

## 68 Tutoring in Reading

Learning to tutor elementary-school-aged children in reading and writing. Focuses on developing strategies for building oral language, reading to and with children, and helping children learn to write. Requires class meetings and 10 hours of fieldwork. One semester, 2 credits.

## 103* Introduction to Sociological Perspectives on Education

This course examines the processes and outcomes of education, especially in the United States, from a sociological perspective. It defines education broadly, as it occurs both in and beyond school, exploring formal and informal learning and the process of socialization/enculturation, as well as education in relation to class, gender, and identity. One semester, 3 credits.

## 262 Children's Literature

Survey of literary genres and elements, including picture books, folklore, poetry, historical fiction, contemporary realism and nonfiction. Some attention to pedagogical issues for teacher credential candidates. One semester or January, 3-4 credits.

## *281 Culture, Communication, and Learning

Explores culture and language in relation to social identity, inter-group relations, and learning, especially in the context of diversity in the United States. Fieldwork in community settings is required. One semester or January, 3-4 credits.

## 300 Sociological and Anthropological Perspectives on Education

Examines the socio-cultural and historical contexts in which learning and development occur. Topics include the social and cultural conditions of K-12 schools, the historical and cultural traditions of major cultural and ethnic groups in California society, and how the background experiences, languages, skills and abilities of members of these groups interact with conditions and practices of schools. Explores concepts, principles, and values necessary to create and sustain an equitable classroom community and a just, democratic society. Fieldwork required. One semester or January, 3 credits.

## 401 Teaching Diverse Learners

Provides theoretical and practical knowledge necessary for working with culturally diverse K-12 students, families, and communities. Includes analysis of alternative viewpoints on current educational goals, practices, and issues, as well as methods for building a just, democratic classroom culture. Requires 20 hours of fieldwork. Prerequisites: 300, 406, CHDV 105, and permission. One semester, 3 credits.

## 402 Literacy Development in the Elementary School

Research and methodology for delivering a balanced, comprehensive program of instruction in reading, writing, and related language arts areas in linguistically and/or culturally diverse elementary classrooms. Topics include: basic word identification skills and comprehension strategies, literature-based instruction, on-going diagnostic strategies/ interventions, content area literacy, and organizing for instruction. Requires 20 hours of fieldwork. Prerequisites: 401, 406, and permission. One semester, 3 credits.

## 403 Content Area Literacy

Research and methodology for preparing secondary teachers to teach content-based reading and writing skills to all students. Topics include: reading comprehension skills, vocabulary, strategies for promoting oral and written language, phonological/structure of the English language, and writing across the curriculum. Requires 20 hours of fieldwork. Prerequisites: 401 and 406 for undergraduates. One semester, 3 credits.

## 404 Second Language Acquisition \& Methodology

Examines native and second language development in theory and as applied to multicultural/multilingual educational contexts, helping prospective teachers develop a sound understanding of first (Ll) and second language (L2) processes. Focuses on the socio-cultural, historical, political nature of language learning in the classroom and how the educational system addresses the needs of English Language (EL) Learners. Requires 20 hours of fieldwork. Prerequisites: 401, 402 or 403 , and 406. One semester, 3 credits.

## 405 Multiple Subject Curriculum \&

 Pedagogy: Integrating Language Arts with History-Social Science and the Visual \& Performing ArtsResearch and methodology for integrating language arts with social studies and the visual and performing arts in linguistically and/or culturally diverse elementary classrooms. Topics include: writing in the content areas, literaturebased instruction, use of simulations, case studies, cultural artifacts, cooperative projects, and student research activities, assessing learning, and organizing for instruction. Fieldwork required. Prerequisites: 401 and 402. One semester, 3 credits.

## 406 Learning and Learners

Examines major concepts, principles, and research associated with theories of human thinking, learning, and achievement, with special attention to the social-cultural nature of learning, the role of students' prior understandings and experiences, and the importance of home-community funds of knowledge. Provides experience in using research-based concepts and principles in designing, planning, and adapting instruction for K-12 students. Requires 20 hours of fieldwork. One semester, 3 credits.

## 407 Multiple Subject Curriculum \& Pedagogy: Mathematics and Science

Examines the components of a well-balanced program of mathematics and science instruction. Topics in math curriculum and pedagogy include computational and procedural skills, conceptual and logical understanding, and problem-solving skills. Topics in science curriculum and pedagogy include the major concepts, principles, and investigations in science (physical, life, earth); investigation skills; how to connect science across other subject areas. Fieldwork required. Prerequisites: 401, 404, and 406. (Concurrent enrollment in 402 is possible with departmental permission.) One semester, 3 credits.

408 Single Subject Curriculum \& Pedagogy I Introduction to secondary teaching in cultural and linguistically diverse secondary schools and classrooms for Single Subject candidates in core academic subjects. Topics include: knowing and understanding state-adopted academic content standards for students; standards-based unit and lesson planning strategies focused on learning outcomes; alternative methods and strategies for assessing students' entry-level knowledge and skills, progress monitoring and summative assessment; using technology in the classroom; developmentally appropriate instruction; laws, student and family rights, professional ethics and responsibilities. Fieldwork required. Prerequisites: 401 and 406. (Concurrent enrollment in 403 is possible with departmental permission.) One semester, 3 credits.

409 Single Subject Curriculum \& Pedagogy II Advanced instructional planning and teaching methods for Single Subject candidates in core academic subject areas, with separate course sections for candidates in the areas of (1) English or history-social sciences and (2) mathematics or science. Focuses on appropriate subject-matter-specific methods for planning and teaching a comprehensive, program that enables students to achieve state-adopted academic content standards. Topics for candidates in all subject areas include supporting English language learners, responding to student diversity, developing a wide repertoire of teaching methods, and effectively using instructional resources including technology. Fieldwork required. Prerequisites: 401, 403, 404, 406, and 408. One semester, 3 credits.

## *484 World Geography

A survey including physical, cultural, and place-name geography appropriate for both undergraduate and post-baccalaureate (graduate) students, including prospective and practicing elementary and secondary teachers. Although not a pedagogy course, appropriate teaching strategies are incorporated. Fulfills the geography requirement for the California Single Subject Credential in social science. One semester, 3 credits.

190, 290, 390, 490* Selected Topics in Education
Variable credits. Permission. May be repeated for credit.

295, 395, 495 Independent Studies
By permission only. Time and credit arranged.
*May be repeated for credit.

$G$hild Development offers an undergraduate major, minor, and coursework for a Child Development Permit. The mission of the Child Development major is to develop a deep understanding of child behavior and growth through the study of developmental psychology. We prepare students for graduatelevel academic work, child advocacy, and/or entry-level careers serving children and families in a variety of fields. Our graduates become teachers, speech pathologists, occupational therapists, clinical psychologists, social workers, child care providers, or enter other careers working with children. Many remain at Whittier for our graduate credential and Master of Arts in Education programs.
We offer a variety of classes on child development by specific age ranges (infancy through early childhood, middle childhood), as well as on specific topics (language development and developmental psychopathology). Most classes are designed to connect research and theory on child growth and development to their practical applications. We also offer classes that qualify students for the Child Development Permit, which can be used to work in child care centers and after school programs throughout the State of California. Some CHDV courses also count toward a minor in education and an Elementary Teaching Credential.
CHDV majors engage in valuable experiences outside of class, providing further opportunities to integrate into campus and community life and to build their resumes for graduate school and future careers. Undergraduates help faculty with research projects studying child behavior. They work at The Broadoaks Children's School, our laboratory school on campus, helping teach children from 2.5 years old through middle school. They mentor preschoolers in local preschool programs that serve underprivileged children through Jumpstart, an Americorps program. They become members of OMEP and advocate for children's rights locally and internationally. In all of these activities, students work alongside faculty members and members of the Whittier community while gaining valuable work experiences.

## GUIDELINES FOR THE MAJOR IN CHILD DEVELOPMENT

Completion of all disciplinary core and extra-departmental requirements, for a total of at least 34-37 credits.

## I. Core Requirements

Introduction to Child Development, CHDV 105, 3 credits
Field Methods: Child Study through Observation and Interaction, CHDV 220, 3 credits
Infancy through Early Childhood, CHDV 315, 3 credits
Middle Childhood, CHDV 330, 3 credits
Practicum: Integration of Theory and Practice, CHDV 477
(early childhood) or 478 (elementary or middle school), 4 credits
Senior Seminar in Child Development, CHDV 497, 3 credits
One additional CHDV elective, 3-4 credits

## II. Additional Requirements

Cultural Contexts of Childhood, ANTH 374, 3 credits OR
Sociological and Anthropological Perspectives on Education, EDUC 300, 3 credits OR approved child development course in Denmark.
Statistics, PSYC 314 OR other approved statistics course, 3-4 credits
One of the following:
Field Research: Crossing Cultural Boundaries, ANTH 311, 3-4 credits
Experimental Psychology, PSYC 212, 4 credits
Approaches to Social Research, SOC 310, 3 credits
At least one additional course ( 3 to 4 credits) related to the major as approved by the advisor

## GUIDELINES FOR THE MINOR IN CHILD DEVELOPMENT

A minimum of 21 credits. A minor must be planned in consultation with a Child Development advisor.
I. Core Requirements

Introduction to Child Development, CHDV 105, 3 credits
Field Methods: Child Study through Observation and Interaction,
CHDV 220, 3 credits
Infancy through Early Childhood, CHDV 315, 3 credits
Middle Childhood and Adolescence, CHDV 330, 3 credits
II. Additional Requirements, Two of the following:

One additional CHDV elective, 3-4 credits
Cultural Contexts of Childhood, ANTH 374, 3 credits OR
Sociological and Anthropological Perspectives on Education, EDUC 300, 3 credits
OR approved child development course in Denmark.
Statistics, PSYC 314 OR other approved statistics course, 3-4 credits
One of the following:
Field Research: Crossing Cultural Boundaries, ANTH 311, 3-4 credits
Experimental Psychology, PSYC 212, 4 credits
Approaches to Social Research, SOC 310, 3 credits

## GUIDELINES FOR THE CHILD DEVELOPMENT PERMIT

A minimum of 15 credits (at least 3 in supervised fieldwork). At the completion of credits, students must apply at The State of California, Commission on Teacher Credentialing to receive a Child Development Permit. This involves: completing Application 4l-4, obtaining Fingerprint Clearance, obtaining Transcripts, and paying a Modest Fee.

## Requirements:

Introduction to Child Development, CHDV 105, 3 units
Infancy through Early Childhood, CHDV 315, 3 units
Early Childhood Education, CHDV 210, 4 units
Child, Family and Community, CHDV 211, 3 units
Integrating Theory and Practice in Early Childhood Education (supervised fieldwork), CHDV 477, 4 units

## COURSE DESCRIPTIONS (CHDV)

## 10 Working with Children

Experiential course involving interaction with children and adults (parents, teachers, other professionals). Typically organized around a theme or question of interest to the class. Requires approximately 2 hours fieldwork per week in addition to class meeting. May be repeated for credit with instructor permission. One semester, 1 credit.

## 11 Supervised Classroom Experience at Broadoaks

Practical experience with various aspects of teaching and learning at Broadoaks. Requires minimum of 3 hours per week in addition to staff meeting. One semester, 1 credit. May be repeated for credit.

## 12 Research with Children

Opportunity to learn and apply research skills by assisting faculty on research. May include research design, data collection, data analysis, and written reports. Permission required. One semester, 1-3 credits, variable. May be repeated for credit.

## 105 Introduction to Child Development

Emphasizes major theories and principles of child development from the prenatal period through adolescence, including across different cultures. Introduces history, literature, and methodology of the study of children and adolescents from developmental perspectives. Critical reading and writing required. This course is not open to students who have taken PSYC 242, Child Psychology. One semester, 3 credits.

## 210 Early Childhood Education

This introductory course presents current concepts in early childhood curriculum development and implementation from birth to age eight. Emphasis is placed on developmentally appropriate curricular practices that consider age, individual needs, language and culture. Topics include developmental theories and characteristics, the importance of play, promotion of appropriate social behavior and the family and community contexts of learning and development. The student will develop various curricular elements and assess its appropriateness in meeting diverse needs, varying levels of functioning and individual child interests. This course is meant for students who plan to
create and implement children's educational programs. This course meets the State of California Title 22 Department of Social Service Classification Indicator DS3 and applies toward the State of California Title V requirements for the Child Development Permit. One semester, 4 credits.

## 211 Child, Family \& Community

Child, Family \& Community is a course for students who are interested in working with children and families as an early childhood educator, specialist or in other professional roles in which a central feature of the job is interaction with children and their families. The focus of this course is on the early childhood period. Theory and research pertaining to family/community-based practices in early childhood programs, parent education models, relationships between families and early child care professionals; issues of diversity; learning supports at home; and community involvement for the early childhood professional will be covered. This course meets the State of California Title 22 Department of Social Service Classification Indicator DS2 and applies toward the State of California Title V requirements for the Child Development Permit. One semester, 3 credits.

## 220 Field Methods: Child Study through Observation and Interaction

Focuses on observing, recording, and interacting with children as a basis for scientific investigation in child development. Field-based research project required. Includes seminar and supervised fieldwork at The Broadoaks Children's School. Prerequisite: 105. One semester, 3 credits.

## 250 Developmental Psychopathology

The field of developmental psychopathology is the study of psychological problems in the context of human development. This class explores all areas of child psychopathology, including the origins and course of individual patterns of maladaptation. Course content will be organized around the major disorders that emerge during childhood and adolescence and will review classification, etiology, and developmental issues related to them. Current issues in treatment, education, and public policy will also be discussed and debated. Prerequisite: 105. One semester, 3 credits.

## 315 Infancy through Early Childhood

Study of physical, cognitive, linguistic, social, emotional, and moral/ethical development from 0 to 8 years. Emphasizes literature review and fieldwork resulting in a scholarly paper. Prerequisites: 105,220 . One semester, 3 credits.

## 330 Middle Childhood

Study of physical, cognitive, linguistic, social, emotional and moral development from 6-12 years. Emphasizes theory, child observation, and research, as well as child and family issues in public policy and current events. Prerequisite: 315 or instructor permission. One semester, 3 credits.

## 377 Working with Children in Diverse Communities

This is a praxis based course that requires active engagement with a community agency in the L.A. area. These agencies provide care and services to racial ethnic minority children and their families. Students will work as interns in programs that range from preschools for lowincome children, family education/support or tutorial centers. The purpose of the course is for students to gain an experiential perspective concerning the influence of context and culture on the development of children. In addition to fieldwork, students will explore through class readings and assignments child development in terms of poverty, culture in contemporary society, the construction of race, ethnicity and culture and ones own identity in relation to these terms, the meaning of active participation within this cultural context, as well as an examination of the function of social service agencies in poor racial ethnic minority communities. Students interested in children and families, social policy, education, sociology, psychology and related fields will find the course beneficial. Students must show proof of a TB clearance at the first class meeting. One semester, 4 credits.

CHDV 477 Practicum: Integrating Theory and Practice in Early Childhood Education This is an intensive, supervised practicum in a preschool or kindergarten classroom at The Broadoaks Children's School. It fulfills a requirement for the California Child Development Teaching Permit. Its purposes are to promote the application of child development theory in early childhood classrooms and to enhance understanding of
child development through daily, hands-on work with young children. The course focuses on developmentally appropriate practice, adultchild interaction for active learning, child assessment, case studies, lesson planning, and critical reflection of instructional practice. Senior Standing. Instructor permission. January. 4 credits.

## CHDV 478 Practicum: Integrating Developmental Theory and Practice in Elementary and Middle School

This is an intensive, supervised practicum in an elementary or middle school classroom at The Broadoaks Children's School for students interested in working with children in schools, as well as in other child and family service settings. Its purposes are to promote the application of developmental theory and to enhance understanding of development through daily, hands-on work with children between the ages of 5 and 14 . The course focuses on developmentally-based teaching practices, adult-child interaction, active learning, child assessment, case studies, state standards, lesson planning, and critical reflection of one's work with children and young adolescents. Senior standing. Instructor permission. January, 4 credits.

## 190, 290, 390, 490* Selected Topics in Child Development <br> Permission. Variable credits.

## 295, 395, 495, 595 Independent Studies in Child Development.

Time and credit arranged. Permission. May be repeated for credit.

## 497 Senior Seminar in Child Development

Builds upon previous core and extradepartmental courses in the major, requires indepth study of a significant issue or question relating to CHDV theory and practice. Includes paper in the major. Senior standing. One semester, 3 credits.
*Not offered every year.

Seamus Lagan (Physics), Director<br>Charles Reeg (Chemistry)<br>Jeff Miller (Mathematics)

\&ngineers apply the principles of science and mathematics to solve real world problems ranging from building bridges to designing computer Chips. Whittier College has established cooperative programs with engineering schools at a number of prestigious universities, allowing students to benefit from the broad intellectual training offered by a liberal arts college and the technical training offered by an engineering school. Students in the 3-2 program normally spend three years at Whittier College and two years attending an engineering school. The five-year program leads to a Bachelor of Arts degree from Whittier College and a Bachelor of Science degree in Engineering from a university. The Engineering 3-2 Program web page, accessible through the Whittier College web page and at http://www.whittier.edu/Academics/3-2EngineeringProgram/, provides up-to-date information and announcements important to students planning to complete the program.

## GUIDELINES FOR THE THREE-TWO PROGRAM IN ENGINEERING

To be recommended for admission to engineering school, students must ordinarily complete 90 credits of coursework at Whittier College including the prescribed sequence with at least a 3.0 overall GPA, a minimum grade of " $C$ " in each of the 3-2 program core courses, and a 3.0 GPA in the core courses. Students recommended by their advisor and the 3-2 director will normally be admitted to at least one of the cooperating universities. The B.A. from Whittier College will be awarded only after a student has successfully completed all of the graduation requirements at both schools.
As part of the 3-2 program, students may elect to pursue a Whittier College B.A. degree in Physics, Math, or Chemistry. The course requirements for these options are extensive and completion of the program in five years requires careful planning. Alternatively, students in the 3-2 program may elect to complete a B.A. in Science and Letters from Whittier College. The requirements for this program are more flexible than the requirements for a B.A. in a particular science. Students who do not complete the entire 3-2 program (e.g., do not finish engineering school) will be awarded a B.A. from Whittier College only after completing all of the requirements of a B.A. as described in the Whittier College Catalog. This will usually entail returning to Whittier College for two semesters.
The B.A. in Science and Letters cannot be awarded to students who do not complete an engineering program. All required Liberal Education courses and Core 3-2 courses must ordinarily be completed at Whittier College. Other courses required for the B.A. can usually be taken either at Whittier College or the engineering school. Courses taken at the engineering school to fulfill Whittier College requirements must be approved in advance by the appropriate department, the Registrar, and by the Director of the 3-2 program.

In addition to satisfying the Whittier College Liberal Education requirements, all 3-2 students must complete the following 38 credits in science and mathematics with grades of " $C$ " or better in each course and a 3.0 GPA:
I. Fundamentals of Physics*, PHYS 150, 180; 9 credits
II. Computational Oscillations and Waves, PHYS 250; 3 credits
III. General Chemistry, CHEM 110 A, B; 8 credits
IV. Calculus and Analytical Geometry, MATH 141 A, B; 241; 12 credits (MATH 139A,B may substitute for MATH141A)
V. Elementary Linear Algebra/Differential Equations, MATH 242; 3 credits
VI. Computer Programming I, COSC 120; 3 credits

## CHEMISTRY

3-2 students wishing to receive a B.A. in Chemistry in combination with an engineering degree must complete, in addition to the core courses, the following 19 credits in chemistry.
The following courses must be taken at Whittier College:
I. Organic Chemistry, CHEM 231A, B; 6 credits
II. Organic Chemistry Lab, CHEM 233A, B; 2 credits
III. Quantitative Analysis, CHEM 220; 4 credits

The following courses must be taken either at Whittier or the Engineering school:
IV. Physical Chemistry, CHEM 321 A; 4 credits
V. One upper division chemistry course approved by the Chemistry Department; 3 credits

## MATHEMATICS

3-2 students wishing to receive a B.A. in Mathematics in combination with an engineering degree must complete, in addition to the core courses, the following 15 credits in mathematics.
I. Abstract Thinking, MATH 280; 3 credits
II. Linear Algebra, MATH 380 or Differential Equations I, MATH 345A; 3 credits
III. Choose one:

Introduction to Analysis, MATH 440A
or
Modern Algebra, MATH 480A; 3 credits
IV. Two additional courses in Mathematics or Computer Science, approved by the Math Department, at the 200 level or above; 6 credits

## PHYSICS

3-2 students wishing to receive a B.A. in Physics in combination with an engineering degree must complete, in addition to the core courses, the following 16 credits in Physics.
I. Modern Physics, PHYS 275; 4 credits
II. Mechanics, PHYS 310; 3 credits
III. Electromagnetic Theory, PHYS 330; 3 credits
IV. Optics, PHYS 320; 3 credits
V. Experimental Physics, PHYS 380; 3 credits

## SCIENCE AND LETTERS

Some 3-2 students may wish to complete a B.A. in Science and Letters in combination with an engineering degree. This option offers more flexibility than the 3-2 majors in chemistry, physics, or math, but students cannot receive a B.A. in Science and Letters without completing an engineering program. The requirements for the Science and Letters major include the Liberal Education program, the 3-2 core courses, the requirements for a minor in Physics, Chemistry, or Mathematics, and three additional credits of upper division courses in any of these disciplines.

Charles S. Adams<br>Tony Barnstone, The Albert Upton Professor of English Language and Literature<br>Wendy Furman-Adams<br>William A. Geiger, Emeritus<br>Sean P.T. Morris, Chair<br>dAvid iAn pAddy<br>Andrea Rehn

At a college named after one of the most important of nineteenth-century American poets, a man known for his commitment to literary art as an agent of social and political justice, it should be no surprise to know that we believe that the study of language and literature is at the core of the liberal arts, those aspects of education that make us humane and free. English courses contribute broadly both to personal enrichment in the liberal arts tradition and to professional development in a variety of fields. Above all, we seek to instill a lifelong habit of reflection, the "delight in the life of the mind" so central to the college's expressed mission. The study of literature enables us to understand ourselves and other people—as individuals, as participants in our own and other historical cultural traditions, and as human beings. We believe that the literary practice we have described here has real consequence in the life of the individual and the life of the community, and in our collective commitment to cultivating the attitudes and values appropriate for leading and serving in a global society.
Many graduating English majors choose to teach—either at the elementary, junior high, or high school level, or, after suitable graduate work, at a college or university. The emphasis on textual analysis, critical thinking, and writing, however, makes English a strong undergraduate major for almost any career. Among the professions our graduates have entered into are journalism, law, politics, medicine, library science, public service, business, public relations, advertising, and TV writing.

## GUIDELINES FOR A MAJOR IN ENGLISH

Students should plan their course of study, in consultation with their faculty advisor, as soon as they have decided upon the major.

## Requirements:

A minimum of 36 credits, at least 24 of which are at the 300 level or above, and the following:

- ENGL 220 Major British Writers to 1785.
- ENGL 221 Major British and American Writers from 1660.
- At least one course from Courses in Writing and Language (Section II below).
- At least one course from the four categories of Advanced Courses in Literature (Section III below).
- At least one course from each of the three following major genres:

Fiction: 331, 332, 333, 336, 337, 352, 358, 362, 363, 370.
Poetry: 324, 327, 329, 334, 335, 364, 371.
Drama: 326, 328, 350, 355.

- ENGL 328 Shakespeare.

The two senior capstone courses:

- ENGL 400 Critical Procedures in Language and Literature.
- ENGL 410 Senior Seminar.


## Strongly recommended:

Reading knowledge of a second language. For those considering graduate study in English: ENGL 382 History of Literary Criticism.
Note: INTD 100 Freshman Writing Seminar is not a departmental course. Neither it nor a course which met the freshman writing requirement at another institution may be counted toward the English major or minor.
ENGL 120 or ENGL 220 (or an equivalent) is a prerequisite to all literature courses with a number of 300 or above, unless otherwise noted.
As noted above, all majors must take ENGL 220 and 221. It is required that they be taken sequentially; it is recommended, but not required, that they be taken before enrolling in upper-division literature courses. Courses for which one or both is especially recommended are noted below.

## GUIDELINES FOR A MAJOR IN ENGLISH WITH AN EMPHASIS IN CREATIVE WRITING

Students should plan their course of study, in consultation with their faculty advisor, as soon as they have decided upon the major.

## Requirements:

A minimum of 36 credits, at least 24 of which are at the 300 level or above, and the following:

- ENGL 220 Major British Writers to 1785.
- ENGL 221 Major British and American Writers from 1660.
- Three creative writing workshops, including at least one at the advanced level, and covering at least two genres: fiction, poetry, screenwriting, playwriting, and/or literary translation. An appropriate internship or independent study can be substituted for one of these courses. Journalism does not count as one of the two genres.
- At least one course from each of the three following major genres:

Fiction: 331, 332, 333, 336, 337, 352, 358, 362, 363, 370.
Poetry: 324, 327, 329, 334, 335, 364, 371.
Drama: 326, 328, 350, 355.

- ENGL 328 Shakespeare.

The two senior capstone courses:

- ENGL 400 Critical Procedures in Language and Literature.
- ENGL 410 Senior Seminar.

For other details, refer to the Guidelines for a Major in English.

A minor in English requires 18 credits, including 120 and at least 9 upper-division credits. (ENGL 220-221 is recommended, but not required, for the minor.) Minors should be planned in consultation with a departmental advisor and must include one course from each of the following: (1) a genre $(324,326,327,328,329,331,332,333,334,335,336,337,350,352,355,358,362$, $363,364,370,371$ ); (2) a historical period; and (3) a major figure (323, 324, 328, 329).
Note: For additional information on both the major and the minor, consult the English Department Handbook.

## COURSE DESCRIPTIONS (ENGL)

## I. Foundational Courses in Language and Literature

## 120 Why Read?

This course offers the opportunity to explore the nature and value of literature and to think about how literature can matter in our lives and the world at large. It gives students a chance to use literature to contemplate some of the great questions of life: "Who am I?", "What is my place in the world?", "What is the good life?", and "What does it mean to be human?" Prerequisite: INTD 100. One semester, 3 credits.

## 220 Major British Writers to 1785

A team-taught introduction to major writers in British literature to 1785 , with particular emphasis on their historical and thematic contexts. Prerequisite: 120 or instructor's permission. One semester, 3 credits.

## 221 Major British and American Writers from 1660

A team-taught introduction to major writers in British and American literature from 1660, with particular emphasis on their historical and thematic contexts. Prerequisites: 120 and 220. One semester, 3 credits.

## 222* Literature of the Bible

A study of the Hebrew Bible and New
Testament, with an emphasis on biblical texts both as literature in their own right and as sources for other literature, art, and music. One semester, 3 credits. (Same as REL 216.)

## 223* Greek and Roman Literature

A survey of the epic, drama, lyric, and literary theory of Classical Greece and Rome - from its beginnings in the ninth century B.C.E. through the early common era - including works of Homer, Sophocles, Euripides, Aristophanes, Horace, Virgil, Ausonius, and Paulinus of Nola. One semester, 3 credits.

## II. Courses in Writing and Language

Majors are required to take at least one course from either the Writing or the Language and Linguistics category below. Both introductory and upper-division writing courses from this list may be counted toward the major.

## A. Courses in Writing

## 201* Introduction to Journalism

The fundamentals of writing for a newspaper; introduction to the profession of journalism; problems of reporting, editing, and publishing. One semester, 3 credits.

## 202 Writing Short Fiction

By writing short stories and critiquing those of peers and published writers, students learn in workshops and conferences to analyze the problems of writing short fiction. Prerequisite: 120 or 220 , and instructor permission. One semester, 3 credits.

## 203 Writing Poetry

An introduction to poetry writing, focusing on form and technique. Workshops, outside readings, visits by established poets. Prerequisite: 120 or 220 , and instructor permission. One semester, 3 credits.

## 302* Advanced Fiction Writing

Intensive workshop in the writing of short stories. Prerequisite: 120 or 220. May be repeated for credit. One semester, 3 credits.

## 303* Advanced Poetry Writing

Intensive workshop in the writing of poetry. Prerequisite: 120 or 220. May be repeated for credit. One semester, 3 credits.

304* Literary Translation Workshop A class in the art and craft of literary translation. Students will read about critical, theoretical, and practical approaches to the translation of literature, develop and define
their own ethics and esthetics of the interesting and troubled act of translation, and finally express their esthetic theories in the form first of a manifesto and later of a translator's preface or afterward to their final project. All students should come to the first class with a reading knowledge of a foreign language, and with a tentative final project in mind, but it will not be expected that all will share the same languages. Students may translate prose or poetry. A prior creative writing workshop is recommended. Prerequisite: ENGL 120 or 220; reading knowledge of a foreign language. One semester, 3 credits.

## 305* Screenwriting

An introduction to writing scripts for films, considering both artistic and professional aspects of the trade. Workshops, readings, and writing exercises will lead toward a detailed treatment and complete first act of a featurelength film. One semester, 3 credits.

## 388* Travel Writing

An introduction to writing and reading about travel. Students write their own travel narratives, read recent and historical travel literature, and consider the cultural impact of various forms of travel. Prerequisite: ENGL 120 or 220 . One semester, 3 credits.

## B. Courses in Language and Linguistics

## 310 Linguistics

A study of the sounds, forms, structure, and meanings of human language, alongside the biological and social forces that shape its use and control its evolution over time. Prerequisite: INTD 100. One semester, 3 credits.

## 311* History of the English Language

A study of the origins of English and its dialects, and of the historical, social, and linguistic forces that shaped its evolution from Prehistoric Germanic through Old English, Middle English, and Modern English. Prerequisite: INTD 100. One semester, 3 credits.

## A. British and European Literature, 500-1700

## 320* Literature of Medieval Europe

A survey of the main trends and genres of literature in Europe from the Fall of Rome (c. 500) to the Protestant Reformation (c. 1500). Most texts (coming from Italy, France, and Germany as well as from England) will be read in translation. Prerequisite: 120 or $220 ; 220$ or 222 recommended. One semester, 3 credits.

321* British Literature, 700-1500
A survey of major genres and works of the British Isles to the close of the Middle Ages. Readings include Beowulf, The Canterbury Tales, Sir Gawain and the Green Knight, The Second Shepherd's Play, and the Morte d'Arthur. Except for Middle English texts, works will be read in translation. Prerequisite: 120 or 220; 220 or 324 recommended. One semester, 3 credits.

## 323* Dante

A close reading (in translation) of Dante's Divine Comedy in the context both of his Vita Nuova and of various historical and literary movements of his time. Prerequisite: 120 or 220; 220 or 223 recommended. One semester, 3 credits.

## 324* Chaucer

A close reading of The Canterbury Tales, Troilus and Criseyde, and one of the dream visions, in Middle English and with their medieval background. Prerequisite: 120 or 220; 220, 320 or 321 recommended. One semester, 3 credits.

325* Literature of the English Renaissance Representative literary works of the sixteenth and seventeenth centuries read in the context of historic events which helped shape these works. Prerequisite: 120 or 220 (or THEA 150); 220 recommended. One semester, 3 credits.

326* Shakespeare and his Contemporaries An examination of several of Shakespeare's plays in connection with plays by such dramatists as Kyd, Marlowe, Jonson, Webster, and Beaumont and Fletcher. Prerequisite: 120 or 220 (or THEA 150); 220 recommended. One semester, 3 credits.

## 327* Reading Renaissance Poetry

A survey of early modern English poetry by both men and women-as well as its Italian influences-from the reign of Henry VIII through the Restoration of the monarchy in 1660, this course will consider Petrarch and Italian Petrarchans, as well as Wyatt and Surrey, Spenser, Sidney and Wroth, Shakespeare, Donne, Lanyer, Philips, Herbert, Herrick, Milton, Dryden, and Finch. Prerequisite: 120 or 220. One semester, 3 credits.

## 328 Shakespeare

A close examination of the major and some of the minor plays. Prerequisite: 120 or 220 (or THEA 150). One semester, 3 credits. (Same as THEA 328.)

## 329* Milton

An examination of John Milton's poetry and major prose in its biographical and historical context, culminating in a close reading of Paradise Lost. Prerequisite: 120 or 220; 220, 222 or 223 strongly recommended. One semester, 3 credits.

## B. British and European Literature, 1700-1900

330* British Literature, 1640-1789
A survey of British literature of the English Civil Wars, Restoration, and eighteenth century, with particular attention to its social context. Special emphasis is given to Dryden, Defoe, Pope, Fielding, and Johnson, as well as to the numerous women writing during the period. Prerequisite: 120 or $220 ; 220,222$, or 223 strongly recommended. One semester, 3 credits.

## 331* Rise of the Novel

The pioneers of the novel in English: Defoe, Richardson, Fielding, and Sterne. Prerequisite: 120 or 220 . One semester, 3 credits.

## 332* Nineteenth-Century English Novel

 Major nineteenth-century novels, selected from the works of Austen, Dickens, Thackeray, the Brontes, Eliot, and Hardy. Prerequisite: 120 or 220. One semester, 3 credits.
## 333* Jane Austen in Context

An intensive study of several Austen novels in terms of historical context, formal innovations, and cultural resonances. Readings may also include works by Austen's literary influences, contemporaries, and heirs. Prerequisite: 120 or 220. One semester, 3 credits.

## 334* Romantic Poetry

Poetry of Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats. Prerequisite: 120 or 220. One semester, 3 credits.

## 335* Victorian Poetry

Major works by such poets as Tennyson, Browning, Arnold, and Hopkins, and some prose. Prerequisite: 120 or 220 . One semester, 3 credits.

## 336* The European Novel

Selected European novels of the nineteenth century, with particular emphasis on Russian fiction. Prerequisite: 120 or 220 . One semester, 3 credits.

## 337* Gothic Fiction

British Gothic fiction from its eighteenth century origins through nineteenth century works such as Frankenstein, Dracula, and The Woman in White. Topics will include the Imperial Gothic, feminist psychoanalytic criticism and queer theory. Prerequisite: 120 or 220. One semester, 3 credits.

## C. British and Global Literature From 1900

## 350* Modern Drama

A survey of modern dramatic works from the 1870s to the 1960s, from naturalism to the Theater of the Absurd. Prerequisite: 120 or 220 or THEA 150. One semester, 3 credits.

## 352* The Modern British Novel

An examination of British novels from 1900 through the 1940s, with an emphasis on modernism and such novelists as Conrad, Woolf, Joyce, Ford, Forster, Lawrence, and Orwell. Prerequisite: 120 or 220. One semester, 3 credits.

## 354* Contemporary British Literature

 A study of British literature and culture since 1950, and of the relationship between literature and national identity in the period. Prerequisite: 120 or 220. One semester, 3 credits.
## 355* Contemporary Drama

A study of key figures and movements in drama and performance art since the 1950s. Prerequisite: 120 or 220 or THEA 150. One semester, 3 credits.

## 358* Postcolonial Novel

Twentieth and twenty-first century novels in English by writers with origins in the former British Empire. Prerequisite: 120 or 220 . One semester, 3 credits.

## D. American Literature

## 275* Chicano Literature

A survey of the works of Mexican-American authors of poetry, prose, and drama, which delves into questions of gender, textual interpretation, and socio-historic contexts. One semester, 3 credits. (Same as SPAN 225.)

## 360* The Origins of American Literature

 The colonial period through the early republic. Consideration is given to the ways in which American literary expression began to concern itself with unique forms and ideas, in such writers as Bradford, Bradstreet, Wheatley, Edwards, Franklin, Brown, Irving, Cooper, and Poe. Prerequisite: 120 or 220; 221 recommended. One semester, 3 credits.
## 361* American Romanticism

The major writers of the literary movement known as "transcendentalism" and the response to them. Such writers as Emerson, Thoreau, Fuller, Hawthorne, Melville, Poe, Douglass, Whitman, Dickinson, Whittier, Longfellow, and Bryant will be considered. Prerequisite: 120 or 220; 221 recommended. One semester, 3 credits.

362* American Realism and Naturalism The major writers of the last half of the nineteenth century to World War I, with emphasis on the two movements of the course title. Such writers as Stowe, Twain, Howells, Crane, James, Norris, London, Chopin, Gilman, Wharton, and Adams will be considered. Prerequisite: 120 or $220 ; 221$ recommended. One semester, 3 credits.

## 363* Modern American Novel

The modernist movement in the American novel from World War I to 1950. Such writers as Cather, Faulkner, Hemingway, Dos Passos, Hurston, Dreiser, Welty, Stein, Steinbeck, Lewis, Fitzgerald, Hammett, and Chandler will be considered. Prerequisite: 120 or $220 ; 221$ recommended. One semester, 3 credits.

## 364* Modern American Poetry

Poets of the modernist era in America, such as Williams, Stevens, Eliot, and Moore. May include some contemporaneous British poets (i.e., Yeats) and American precursors (i.e., Dickinson and Whitman). Prerequisite: 120 or 220. One semester, 3 credits.

## 365* Hemingway and Eliot

Close reading of major works by Ernest Hemingway and T.S. Eliot, with attention to literary form, ethical situations, and world views. Prerequisite: 120 or 220 . January, 4 credits.

## 370* Postmodern American Novel

An examination of American novels since 1950 in relation to postmodern aesthetics, theory, and culture. Prerequisite: 120 or 220 . One semester, 3 credits.

## 371* Contemporary American Poetry

Readings in American poetry from post-World
War II to the present. May include some contemporaneous world poetry. Prerequisite: 120 or 220 . One semester, 3 credits.

## 373* The African-American Literary Tradition

An examination of the development of the African-American literary tradition. Among the writers and topics which may be considered are slave narratives, the oral tradition, Wheatley, Douglass, the Harlem Renaissance, Hughes, Hurston, Baldwin, Wright, Ellison, Walker, Angelou, and Morrison. Prerequisite: 120 or 220 . One semester, 3 credits.

## 374* Asian-American Literature

A course in contemporary Asian-American fiction, poetry, and drama, with an emphasis on immigrant history and on media images of Asian-Americans. Prerequisite: 120 or 220. One semester or January, 3 or 4 credits.

377* Autobiography and American Culture Examination of autobiography as a particularly American genre. Consideration of the theory and history of the genre. Emphasis on autobiography as a literary expression of a variety of literary, historical, and cultural concerns. Prerequisite: 120 or 220 . One semester, 3 credits.

## IV. Literary, Formal, and Thematic Alternatives

## 280* Literature on Film

An examination of the complex relationships between literary works and their cinematic realization. Prerequisite: INTD 100. January, 4 credits.

381* Discourses of Desire: Representing Love and Gender from Plato to Kundera Representations of romantic love by both men and women from the Song of Songs and Plato's Symposium, through the Middle Ages and Renaissance, to the end of the twentieth century. Prerequisite: 120 or $220 ; 220$ recommended. One semester, 3 credits.

## 382* History of Literary Criticism

Major approaches and critical assumptions in the history of literary criticism; special attention to critical movements since 1930. Prerequisite: 120 or 220; 220-21 recommended. One semester, 3 credits.

## 383* Asian Literature

Masterpieces, ancient and modern, of Asian literature-including philosophical writings, poetry, drama, short stories, and novels-from classics such as the Analects of Confucius to contemporaries such as Kobo Abe and Bharati Mukherjee. This class will focus on two or three of the following areas: India, China, Japan, and the Middle East. Prerequisite: 120 or 220 . One semester, 3 credits.

## 384* Robin Hood through the Ages

An intensive study of over 600 years of Robin Hood materials, from the earliest medieval ballads and chronicles through later plays and novels to modern films. Each age has reinvented the character and his companions to address its own concerns, and we will investigate how and why people continue to do this. Prerequisite: 120 or 220. January, 4 credits.

## 385* Celtic Literature

This course offers an overview of Irish, Welsh, Scottish, Cornish, Manx, and Breton literary traditions. Beginning with the ancient texts of the Tain and the Mabinogion, this survey will finish with an exploration of present-day Celtic literature. Prerequisite: 120 or 220 . One semester, 3 credits.

386* Satire
The main currents, techniques, and purposes of satire from ancient Greece to the present. Prerequisite: 120 or 220 . One semester, 3 credits.

## 387* Science Fiction

A reading and viewing of science fiction from H.G. Wells to Octavia Butler in historical, thematic, stylistic, and socio-political terms. Prerequisite: 120 or 220 . One semester or January, 3-4 credits.

## 388* Travel Writing

An introduction to writing and reading about travel. Students write their own travel narratives, read recent and historical travel literature, and consider the cultural impact of various forms of travel. Prerequisite: ENGL 120 or 220 . One semester, 3 credits.

## 389* The Lord of the Rings: J.R.R. Tolkien and his Sources

An in-depth study of Tolkien's stories and of the medieval works that influenced them. Readings include The Lord of the Rings trilogy, The Hobbit, The Silmarillion, and shorter Tolkien works such as Farmer Giles of Ham, alongside influences such as Beowulf, Sir Gawain and the Green Knight, Snorri Sturlusson's Edda, The Saga of the Volsungs, and selections from Chaucer, The Kalevala, and the Arthurian legends. We will also delve into Humphrey Carpenter's biography of Tolkien as well as short lessons in the languages of Finnish and Elvish. Prerequisite: 120 or 220 . January, 4 credits.

## 190, 290, 390, 490* Selected Topics in English and American Literature

Advanced study in a major figure or movement. Permission required. One semester or January, 3-4 credits. May be repeated for credit.

## 295, 395, 495 Independent Studies

Credit and time arranged. Permission
required. May be repeated for credit.
420 Preceptorship: Teaching Literature Collaboration with professors in teaching introductory literature courses. For advanced majors interested in the theory and practice of teaching literature. Requires attendance at the relevant course (120, 220 or 221) and intensive work with the instructor. Prerequisites: 120 or 220 and instructor permission. One semester, 1 credit. May be repeated for credit.

## V. Capstone Courses and Paper in the Major

Majors are required to take these two courses during their senior year. Senior Seminars may require prerequisites to ensure preparation for advanced work in the area. Students should consult their advisors at least two years in advance to select, then prepare for, an appropriate seminar.

## 400 Critical Procedures in Language and Literature

Consideration of the major theoretical positions in contemporary criticism with their application to selected literary texts. Designed for senior English majors. The portfolio produced in this course satisfies the Paper-in-the-Major college writing requirement for English majors. Permission required. One semester, 3 credits.

## 410 Senior Seminar

Intensive study of a particular figure or topic, for seniors. Prerequisites as appropriate to the subject. Permission required. May be repeated for credit. One semester or January, 3 credits.
*Not offered every year.
sal johnston, Coordinator for Environmental Studies
David Mbora
Christine Metzger
Amy Moskun
Cheryl Swift, The James Irvine Foundation Professor of Biological Sciences (Coordinator for Environmental Science)

更nvironmental Science and Environmental Studies are emerging interdisciplinary approaches to examining the environmental problems that human society is currently facing on Earth; these include understanding the implications of global climate change and the costs and benefits of maintaining biodiversity, the handling and disposal of hazardous materials, and managing risks associated with large scale natural phenomena such as earthquakes, floods, and fires. The Environmental Science/Studies major requires a shared core of courses that build expertise in both the scientific and social/cultural analysis of environmental problems. The strength of the approach of environmental scientists to these issues is reflected in the interdisciplinary nature of the environmental science curriculum at Whittier College, and the environmental studies major reflects the complex interaction between the practice of science and human culture. The Environmental Science and Environmental Studies curriculum is based on a balance between the in-depth scientific knowledge needed to tackle difficult problems and the breadth necessary to view the problems from multiple perspectives.

# CORE COURSES FOR THE ENVIRONMENTAL STUDIES/ ENVIRONMENTAL SCIENCE MAJOR 

Introduction to Environmental Science, ENVS 100, 4 credits
Human Ecology: Biological Anthropology, ANTH 200, 3 credits, or
Globalization and Environment, INTD 221, 4 credits
Principles of Economics: Microeconomics, ECON 201, 3 credits
Environmental Analysis, Policy, and Law, ENVS 301, 3 credits
Integrated Research Methods, ENVS 396, 4 credits
Senior Seminar, ENVS 496, 1 credit

Math: Precalculus Mathematics, MATH 085, 3 credits, or
Integrated Precalculus/Calculus, MATH 139 A \& B; 7 credits, or
Calculus and Analytic Geometry I, 4 credits

Statistics: Elementary Statistics, MATH 080, 3 credits, or
Statistics, PSYC/SOC 314, 4 credits

## GUIDELINES FOR THE ENVIRONMENTAL STUDIES TRACK

Students interested in pursuing post graduate work are strongly encouraged to work closely with their academic advisor.

1. Students must complete at least 16 credits from the Environmental Studies course list with at least 10 credits at the 300 level or above.
2. Students must complete one course from the Environmental Science Track

## GUIDELINES FOR THE ENVIRONMENTAL SCIENCE TRACK

Students interested in pursuing post graduate work are strongly encouraged to work closely with their academic advisor

1. Students must complete at least 16 credits from the Environmental Science course list with at least 10 credits at the 300 level or above.
2. At least one course from the Environmental Studies course list.

## COURSE DESCRIPTIONS

## REQUIRED COURSES

(These courses must be completed by all students majoring in Environmental Science or Environmental Studies)

## ENVS 50 Environmental Science Colloquium

Weekly colloquia from scientists engaged in study of the environment as well as various stakeholders in environmental issues. Students interested in environmental science and/ or environmental issues are encouraged to attend colloquia. Seniors will normally give a colloquium presentation as part of the paper in the major requirement. 1 credit. May be repeated for credit.

## ENVS 100 Introduction to Environmental Science

An introduction to the field of environmental science, examined from multiple perspectives: biology, earth sciences, chemistry, and physics. The class focuses on the contributions these different disciplines make to the diagnosis and solution of environmental problems, with an emphasis on the interdisciplinary nature of these issues. One semester, 4 credits.

ENVS 301 Environmental Analysis, Policy and Law
Review of U.S. and California environmental regulations and their application, historical overview of national and international environmental policy development with attention to current environmental policy issues. Lecture and Field Trips. One semester, 3 credits.

## ENVS 396 Integrated Research Methods

This course focuses on developing expertise in environmental sampling and analysis. Topics to be covered include basic surveying and mapping techniques, community sampling, air and water quality analysis, and basic statistical analysis of data. The course is topic based, and will investigate several problems over the course of the semester using field and laboratory instrumentation. This course is designed for second semester sophomores or juniors. Lecture, Laboratory and Field Trips. Prerequisite: ENVS 100. One semester, 4 credits

## ENVS 496 Senior Seminar

This course is designed for seniors completing their paper in the major and their senior presentation. This course will meet weekly to evaluate progress toward the paper in the major. Requirements for the course include the selection of a faculty sponsor, preparation for the oral senior presentation, and peer review of progress on the paper in the major. One semester 1 credit.

## Environmental Science Courses

## ENVS105 Environmental Geology: Hazards and Resources

An introduction to processes at the Earth's surface. The class explores the global weather and climate systems, the role of water in the environment, and processes that shape the surface of the Earth. The class provides basic information on the physical processes maintaining the environment in which life exists. Special topics include global climate change, the greenhouse effect, tornadoes, hurricanes, El Nino, floods, landslides, and a survey of glacial, coastal, and stream environments. Lectures and laboratory. One semester, 4 credits.

## ENVS251 Ecology \& Evolution of Organisms

An introduction to the structure and function of populations of plants and animals. Topics to be covered include growth and behavior of populations, ecology of communities, ecosystem function, transmission genetices, and the evolution of populations and species. Lecture, Laboratory, and Field Trips.
Prerequisite: Biology 152 or Environmental Science 100. Cross-listed with BIO 251. One semester, 4 credits.

## ENVS 291*Earth's Atmosphere

Fundamental properties of the atmosphere and the basic scientific principles behind weather and climate. Atmospheric circulation, weather patterns, atmosphere-ocean interactions and the human impact on the atmosphere such as air pollution, ozone depletion and climate change. Lectures and Laboratory. One semester, 4 credits.

## ENVS 320*Environmental Chemistry

Atmospheric and condensed phase chemistry involved in modern environmental challenges including: global warming; energy supply; air, water and soil pollution; and ozone depletion. Prerequisite: CHEM 110A or instructor permission. One semester. Lectures and Laboratory. Cross-listed with Chem 282. One semester. 4 credits

## ENVS 330*Soils and Environmental Geomorphology

Geomorphology is the study of landforms and the biological, physical, and chemical processes that create and change them. The formation of soil and the development of soil processes are fundamental to understanding geomorphology. This course will examine the role of soils in the environment through time and the connections between how soils, climate, and tectonics can the geomorphological landscape over time. Students will gain knowledge of soil-forming processes, learn how to make field descriptions and interpretations of soils, and investigate soil as a natural resource and as an ecosystem. Students will also engage in practical labbased natural resource management decisionmaking. Lectures, laboratory, Field Trips Prerequisite: ENVS 100 or 105 . One semester, 4 credits

## ENVS 345*Energy Resources

An in-depth examination of energy resources from a geological and environmental perspective. Topics include petroleum geology, traditional and alternative energy sources, extraction methods, social impacts, and environmental hazards. Labs will use casestudies and datasets to investigate the decisionmaking process and current events. Lectures, Laboratory, Field trips. Prerequisite: ENVS 100 or 105 . One semester, 4 credits

## ENVS 352*Long-term Environmental Change

This course examines past climate change on a variety of time scales, throughout Earth history, as well as the relevance of ancient climate in understanding present and future global warming. Time periods of emphasis include the Cenozoic (last 65 million years), the Quaternary (last 1.8 million years), and the Holocene (last 11,000 years). Topics include the geologic record, age-dating techniques, paleoenvironmental reconstruction, ocean circulation, biotic and environmental responses to climate change, glaciology, Snowball/Greenhouse Earth theory, isotopic records and other proxy datasets, and climate models and predictions. Lectures, Laboratory. Prerequisite: ENVS 100 or 105.4 credits

## ENVS 379*Conservation Biology

Conservation biology deals with the study of preserving biodiversity. Topics to be covered include the effects of habitat fragmentation on populations, reserve design, the effect of fragmentation on levels of diversity, and issues surrounding the problem of maintaining genetic diversity. Lectures, Laboratory, and Field Trips. Prerequisite: BIOL 252. Cross -listed with BIO 379 One semester, 4 credits.

## ENVS 384*Marine Biology

The physical, chemical, and biolgical aspects of the marine environment; emphasizes factors affecting the distribution and abundance of marine organisms. Lectures, Laboratories, Field Trips Pre-requisite: BIOL 252. Cross -listed with BIO 384 One semester, 4 credits.

## ENVS 445* Evolutionary Biology

Examination of the mechanisms of micro evolutionary and macro evolutionary change. Lecture and laboratory. Prerequisite: 252. Cross-listed with BIO 445 . One semester, 4 credits.

## ENVS 473* The Southern California Flora: Ecology, Evolution and Taxonomy

Taxonomic and ecological study of native plants. Lectures, Laboratory, and Field Trips. Prerequisite: BIOL 252 Permission.. Crosslisted with BIO 473. One semester, 4 credits.

ENVS 485* Advanced Field Topics Crosslisted with BIO 485 . One semester, 4 credits

## Environmental Studies Courses

## PHIL 260 Environmental Ethics

We face unprecedented environmental crises: mass extinctions, Global Warming, pollution and depletion of natural resources that sustain life on the planet, and exponential human population growth. The course traces the evolution of theoretical responses, from the application of traditional ethical theories to the development of comprehensive alternative environmental philosophies. One semester, 3 credits. Recommended: Phil 105.

## ANTH 200 Biological Anthropology

This course studies the physical aspects of human populations and the evolutionary history of our species. This history is studied through an overview of genetics and evolutionary theory, the fossil record, our close primate relatives and variation among contemporary humans, which underlies
observable changes as our species continues to evolve. One semester, 3 credits

## ANTH323* Environmental Anthropology

The changes that humans make in the natural environment are related to their worldviews and to their ideas about what the relationship between hum ans and nature should be. This course will explore these relationships cross-culturally through the readings of ethnographies and the viewing of films. Sophomore standing or above or instructor's permission. One semester, 3 credits, or January, 4 credits

ENVS 348 Production, Culture \& Society
This course approaches food--something Americans often take for granted--as a complex social system. We will investigate the social relationships and modes of organization that constitute the economic, political, environmental and social contexts for the development, production, distribution, promotion and consumption of food in contemporary society. Thus the course engages topics such as genetically modified food, the politics of food regulation, industrial agriculture, alternative agriculture and /or sustainable development. Cross-listed with SOC 348 One semester, 3 credits.

ENVS 350* World Environmental History
An examination of the world's environmental history from both local (e.g. California and the U.S.) and global perspectives (e.g. deforestation, species extinctions, climate change and global warming, nitrogen flows) designed to explore the interaction between humans and the natural environment, and to assess the extent of the human impact on natural environments over time.

## ENVS 357 Sociology of Development

Considers development issues related to economics, politics, inequality, human rights, gender, and environment and examines modernization, dependency, and world-system approaches to the theoretical understanding these issues. Pre-requisite: 100 or instructor permission. Cross-listed with INTD 221 and SOC 357. One semester, 4 credits.

ENVS 358 Population Problems \& Policy
This course provides an opportunity to develop quantitative skills in the analysis of population processes and in the formulation of policies attempting to intervene in these processes or to take them into consideration within other public and private sector policy arenas. The course will be of particular relevance to those interested in actuarial science, in environmental sustainability, in social policy, and in urban and other governmental and service planning processes. We examine the necessity, techniques, and precariousness of demographic projections in such areas. The course will assume prior completion of the Quantitative Reasoning (QR) and Introductory Laboratory Science (ILS) requirements, or their equivalence for WSP and transfer students. Cross-listed with INTD 216 and SOC 358. One semester, 4 credits.

## ENVS 375 Modern Society

This course examines forms of social structure, culture, and interaction associated with highly industrialized societies. The course uses the nature/culture binary to organize an examination of the social, economic, political and ecological transformations associated with modernity.
Prerequisite: 100 or instructor permission. Cross- listed with SOC 375 One semester, 3 credits.

190, 290, 390, 490 Selected Topics in Environmental Science/Studies
Variable credits. Permission. May be repeated for credit.

295, 395, 495 Independent Studies
Credit and time arranged. Permission. May be repeated for credit.

Marie-Magdeleine Chirol, Modern Languages, French
Paula Radisich, Art History
Elizabeth Sage, History
Andy Wallis, Modern Languages, French

Offered as a minor only, the French Cultural Studies program blends art, history, French language and literature, to explore issues of French and Francophone culture.

## REQUIREMENTS FOR AN INTERDISCIPLINARY MINOR IN FRENCH CULTURAL STUDIES

6 courses / 18 credits are required, including:
2 courses in Art History ( 6 credits)
Art of the Eighteenth-Century, ART 366
Age of Impressionism, ART 368
Age of Dada \& Surrealism, ART 369
2 courses in History (6 credits)
Modern France, HIST 364
Race, Class, and Gender in Modern Europe, HIS 360
Socialism and Revolution in Europe, HIST 363
The European City, HIST 362
2 courses in French (6-7 credits)
a. One language course numbered between FREN 120 and FREN 315 (this does not include the courses listed below). Students need to take the placement test if they have prior knowledge of French.
b. One literature, culture or cinema class taught in English or in French. Courses usually taught in French are numbered between FREN 325 and FREN 490 and are listed under Dept. of Modern Languages and Literatures.
Selection of courses taught in English:
Francophone Culture and Civilization, FREN 126
French Cinema, FREN 173
Le Flaneur, FREN 174
Women's Portraits/Portraits de Femmes, FREN 175
Franco-African Cinema and Literature, FREN 177
Pre and Post Revolutionary Child, FREN 178
Franco-Asian Literature, FREN 181
Riots, Revolts, and Revolutions, FREN 182

Recommended
Study in France or a French-speaking country is recommended as a supplement to the interdisciplinary minor in French Cultural Studies. A maximum of three courses will be allowed to be transferred in from study abroad, one in each category.

Marie-Magdeleine Chirol, Modern Languages<br>Gustavo Geirola, Modern Languages<br>Susan Gotsch, Political Science<br>Marilyn Gottschall, Religious Studies<br>Wendy Furman-Adams, English Language and Literature<br>Jennifer Holmes, Theatre<br>Ann Kakaliouras, Anthropology<br>sal johnston, Sociology<br>Laura McEnaney, History<br>Jose Ortega, History<br>Rebecca Overmyer-Velázquez, Sociology<br>Paula Radisich, Art History<br>Geetha Rajaram, Economics<br>Elizabeth Sage, History<br>Anne Sebanc, Child Development<br>Ayesha Shaikh, Psychology<br>Cheryl Swift, Biology<br>Michelle Switzer, Philosophy

> ender and Women's Studies, distinguished by its interdisciplinary Phature, brings together faculty and students who share an interest n studying and producing theory and research about women's experiences. The interdisciplinary approach leads students to a critical perspective and enables them to understand more fully the historical and contemporary relations of power and gender. By employing different methodologies and by considering questions regarding gender within different disciplines, students achieve an understanding of the complexity and the wholeness of human experience. Sex, sexuality, and gender are examined as biological, psychological, historical, and cultural phenomena. Special emphasis is placed upon the nature of gender as a social construction varying with respect to time, place, and context. Finally, students are exposed to new scholarship on women and are encouraged to engage critically with feminist theories and practices.
A Gender and Women's Studies minor is useful preparation for professional and postgraduate work in a variety of fields. On a personal level, it enhances the human potential of both women and men by questioning and redefining societal values and encouraging them to work toward greater equality.

## REQUIREMENTS FOR A MINOR IN GENDER AND WOMEN'S STUDIES

18 credits of course work.
Required course, choose one:
Feminist Social Theory, SOC 406, 3 credits OR
Feminist Philosophy, PHIL 385, 3 credits
Note: Although only one of the two courses is required, both may be taken for credit toward the minor in Gender and Women's Studies, and both are therefore listed below under Upper Division Elective Courses.

At least two Introductory Courses:
Women and the Visual Arts, ART/GWS 207
The Role of Science in Defining Gender, INTD/GWS 220
Philosophy of Love and Human Sexuality, PHIL/GWS 250
Women and Religion, REL 253/GWS
Race, Class and Gender, SOC/GWS 200
Social Movements, SOC/GWS 260

## At least two Upper Division Courses:

Male and Female: the Anthropological Perspective, ANTH 327/GWS 327
Economics of Race and Gender, ECON/GWS 357
Discourses of Desire: Representing Love \& Gender from Plato to Kundera, ENGL/GWS 381

Women's Portraits/Portraits de Femmes, FREN/GWS 175/475
Women, Family, and Work in the Modern U.S., HIST/GWS 309
Race, Class, and Gender in Modern Europe, HIST/GWS 360
Feminist Philosophy, PHIL 385/GWS 386
Human Rights, PLSC/GWS 330
Psychology of Women, PSYC /GWS 364
Sociology of Gender, SOC/GWS 385
Feminist Social Theory, SOC/GWS 406
Women's Voices in the Hispanic World, SPAN/GWS 484

[^0]Coordinators: George DaRoza, Chinese, Gustavo Geirola, Spanish
Concentration Advisors:
Culture: David Iyam, Anthropology
National/transnational institutions: Joyce Kaufman, Political Science, Lana Nino, Business Administration, Marilyn Gottschall, Religious Studies
Issues: Mike McBride, Political Science
Geographical areas: George DaRoza and Gustavo Geirola, Modern Languages, Becky Overmyer-Velasquez, Sociology

$\tau$he Global and Cultural Studies (GCS) major introduces students to the yorld of the 21 st century by encouraging them to explore contemporary problems and issues from a number of different perspectives and points of view. The Global and Cultural Studies major offers students an opportunity to concentrate on a specific area of interest within a broad interdisciplinary framework. Each student selects an area of concentration which then structures the individual's pathway through the major.
The four concentrations are:

1. NATIONAL/TRANSNATIONAL INSTITUTIONS: This concentration examines the role and function of political, economic or other institutions in the global context. It could include a focus of any of the following: nation states, corporations, NGOs, international organizations or other non-state actors.
2. CULTURE: This concentration enables student to explore the changing face of cultural and social institutions in the 21st century. It could include a focus on gender, kinship, marriage, demographics, or other cultural patterning.
3. GEOGRAPHICAL AREA: This concentration allows the student to explore the impact of multiple forces of globalization within a specific geographical region, i.e., Latin America, Asia, or Europe.
4. ISSUES: This concentration allows for in-depth exploration of a particular social or environmental issue. Examples include human rights, terrorism, AIDS/health, environment, population, refugees, stainability, intellectual property, etc.
Students begin with an introductory course on globalization that explores the concept from multiple points of view (historic, political, economic, sociological) and interrogates its impact on particular countries and cultures. Students should select their concentration in the sophomore year as this decision will guide all other curricular decisions, including the selection of the methods course, electives, cultural immersion units and the paper in the major. In the junior year students in the major will participate in a cultural immersion experience, preferably a semester-long study abroad, in order to get first-hand knowledge of their area of concentration. A senior capstone seminar enables students to integrate study abroad/cultural immersion experience with their culminating research project.

## GUIDELINES FOR A MAJOR IN GLOBAL AND CULTURAL STUDIES

The Global and Cultural Studies major requires a minimum of 39 credits, leaving opportunity for a complementary second major; many of the courses within the GCS major can also meet the requirements for the second major, as well as satisfy Liberal Education requirements.

Requirements:

1. Introduction to Globalization, GCS 100, 3 credits
2. Two intermediate courses, 6 credits:

Introduction to Cultural Anthropology, ANTH 210
And one of the following:
Comparative Politics, PLSC 140
International Relations, PLSC 220
Comparative Economic Systems, ECON 383
3. Methods course ( 3 credits) appropriate to area of concentration. Select from the following:

Cultural Studies: Field Research Methods: Crossing Cultural Boundaries, ANTH/SOC 311
Historical Methods, HIST 380
Econometrics, ECON 304
Political Methodology, PLSC 280
Approaches to Social Research, SOC/SOWK 310
4. Electives in area of concentration ( 12 credits, six of which may be taken while studying abroad.) Because of the multiple options available to the student within this interdisciplinary major, it is important that concentrations and electives be made in consultation with an advisor. Guidelines for this process are below:

National/transnational Institutions electives: Introduction to International Relations, PSC 220 (required) Three courses from the departments of business, economics, sociology, political science, religion, or history. No more than two courses should be taken in any one department.
Culture electives: one course from ANTH: Peoples of the World series (required) Three courses from either the arts, philosophy, religion, politics and economics, or comparative studies. No more than two course should be taken in any one department.

Geographical area electives: Study abroad will be in that geographical area and three electives should focus on that region, each of which should be chosen from a different disciplinary perspective, i.e., history, political science, philosophy, arts, etc.
Issues electives: Students should select four classes relevant to their particular interest, no more than two in any given department.
5. Cultural immersion/study abroad ( 12 credits): Ideally, students in the major will study off-campus their junior year, either abroad in their region of concentration or in some other location, foreign or domestic, that would allow them to develop their area of concentration more deeply. GCS majors are encouraged to study an appropriate language through the Intermediate level ( 221 or above). Coursework in a language not taught at Whittier College should be approved by the GCS Faculty Council in consultation with the Chair of The Department of Modern Languages.
6. GCS 499 Senior seminar, (3 credits): A senior capstone will bring all of the majors together to integrate their coursework with their cultural immersion experience and to peer review their papers in the major.

## GUIDELINES FOR A MINOR IN GLOBAL AND CULTURAL STUDIES

The minor in GCS will include 21 credits of the following subset of courses from the major:

1. Introduction to Globalization, GCS 100, 3 credits
2. One Intermediate course ( 3 credits) in area of concentration, select one of the following:

Introduction to Cultural Anthropology, ANTH 210
Comparative Economic Systems, ECON 383
Comparative Politics, PLSC 140,
International Relations, PLSC 220,
3. One methods course ( 3 credits) in area of concentration, select from the following:

Field Research Methods-Crossing Cultural Boundaries. ANTH/SOC 311
Historical Methods, HIST 380
Econometrics, ECON 305
Political Methodology, PLSC 280 or
Approaches to Social Research, SOC/SOWK 310, 3 units
4. Electives ( 9 credits) taken in the area of concentration. Courses may be drawn from study abroad experience
5. The senior seminar, GCS 499, 3 credits

## COURSE DESCRIPTIONS (GCS)

100 Introduction to Globalization
Using the general theme of "globalization" as the organizing principle, the course will introduce students to the players (i.e. cultures, states, other actors such as NGOs and international organization, etc.) that are affected by, and in turn affect, globalization, how they make decisions and who is affected by those decisions, and the interaction between and among these various actors. The course will include the study of a number of specific topics and cases, chosen each semester to allow exploration of globalization issues from a variety of disciplinary perspectives. One semester, 3 credits.

190, 290, 390, 490* Selected Topics in Global and Cultural Studies
Variable credits. Permission. May be repeated for credit.

295, 395, 495 Independent Studies
Credit and time arranged. Permission. May be repeated for credit.

499 Senior Seminar
Permission. One Semester, 3 credits.
*Not offered every year.

Robert Marks, Richard and Billie Deihl Professor of History
Laura McEnaney, Nadine Austin Wood Chair of American History
José Orozco

## José Ortega

Elizabeth Sage, Chair

$\tau$Department of History offers a curriculum that is global in its approach and integral to a liberal arts education. A history major enables us to understand human beings and institutions around the world through the study of the human past. It encourages us to understand ourselves and our multiple communities through comparison with cultures of other times and places. In a world that is increasingly interconnected, the study of history is a particularly apt way for us to understand both how the world we live in came to be and our place in it. Indeed, the department strives to place all national and local histories into a global context.
Reflecting the department's commitment to providing an education fit for a global world, the course sequence begins in the freshman year with an "Introduction to World History" and ends with a capstone seminar. Three courses in one world area offer depth, and one course in three other world areas contributes breadth of knowledge about the world.
History 101 (Introduction to World History) and 200-level courses serve as the foundational prerequisites for the 300 -level courses. Students planning a History major should take History and Theory in the sophomore year, and Historical Methods in the junior year.
To help prepare students for the world of work or for graduate school, the History Department's curriculum offers two additional opportunities. Preceptorships (History 60 and 61 ) offer a special opportunity for junior and senior History majors to work with Whittier faculty or teachers off campus (local grade or high schools) as teaching assistants. The Preceptorships are especially useful for students intending to pursue either a graduate degree or a career in secondary school teaching, although they are open to all majors. Through its Internships (History 50), the History department offers opportunities for students to gain work experience in a variety of educational or other settings, including museums, libraries, law offices, electoral politics, or non-profit organizations.

## GUIDELINES FOR A MAJOR IN HISTORY

A minimum of 30 credits
I. Foundation courses (four courses, 12 credits)

Introduction to World History, HIST 101, 3 credits
The U.S. to 1865, HIST 206, 3 credits
The U.S. Since 1865, HIST 207, 3 credits

One additional 200-level course, 3 credits
II. Theory and Methods Seminars (three courses, 7 credits)

History and Theory, HIST 280, 3 credits
Historical Methods, HIST 380, 3 credits
Either Internship, HIST 50, 1 credit
or Preceptorship in World History, HIST 60, 1 credit
or Preceptorship in U.S. History, HIST 61, 1 credit
IV Depth
Three 300-level courses in one world area (Asia, Europe, Latin America, United States), 9 credits
III. Breadth

One course in three world areas (Africa, Asia, Europe, Latin America, or United States), 9 credits, 200 or 300 level, cannot be same as depth area
V. Capstone Seminar, HIST 480, 3 credits

Recommended:
A course in statistics
Two to four years of a foreign language
Study abroad

## REQUIREMENTS FOR A MINOR IN HISTORY

A minimum of 18 credits, including either History 280 or 380, and at least one course in two of the following world areas: Africa; Asia; Europe; Latin America; United States.

## COURSE DESCRIPTIONS (HIST)

## FOUNDATION COURSES

## 101 Introduction to World History

A team-taught survey of world history since the 15 th century. Serves as a basic introduction to the discipline of history and to the history major. Familiarizes students with a global, non-Eurocentric approach to history. One semester, 3 credits.

## 201 Western Civilization since the Seventeenth Century

The development of Western civilization in the Age of Reason, the Enlightenment and the more recent ages of Revolution, Romanticism, Imperialism, and World Wars. One semester, 3 credits.

## 206 United States to 1865

Origins and early national development of the United States to the Civil War; development of colonial peoples and communities, growth of nationalism, rise of democracy, and divisiveness of Civil War. One semester, 3 credits.

207 United States since 1865
National development from Reconstruction to the Reagan era. Explores industrialization, urbanization, foreign policy and wars, domestic politics, and social trends and movements. One semester, 3 credits.

210 The Making of the Atlantic World: 14001800
Unlike typical courses, which focus on a particular region, this course examines the history of the Atlantic Ocean, itself, from discovery of the Americas to the American and Haitian Revolutions. Drawing on readings about people in colonial North America, colonial Latin America, pre-colonial Africa, and European history, we will explore the connections among the peoples of all four of these continents. We will examine how historians have come to understand the Atlantic as a bridge between cultures, and as a means of cultural, economic, intellectual, and ecological exchange. One semester, 3 credits.

## 220 East Asian Civilizations

The development of East Asian civilizations, primarily China and Japan, from earliest times to the present, emphasizing the relationships among social, economic, political, and intellectual institutions. One semester, 3 credits.

## 230 Introduction to African History

A history of sub-Saharan Africa from the fifteenth century through the present, exploring the trans-Atlantic slave trade, European colonialism, and post-colonial developments. One semester, 3 credits.

## 242 Introduction to Colonial Latin America

Latin America from pre-Columbian times to the 1820 s; topical treatment of historical developments and trends basic to understanding the colonial period of Latin American history. One semester, 3 credits.

## 246 Introduction to Modern Latin America

Topical treatment of political, cultural, and economic developments in Latin America that are basic to understanding the modern period of Latin American history (1820s-1990s). One semester, 3 credits.

## 247 Introduction to Modern Central America

Topical treatment of political, cultural, and economic developments in Central America that are basic to understanding the modern history (1820s-1990s) of Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama. One semester, 3 credits.

## WORLD AREAS

Asia

## 321 Imperial China

China from earliest times to the 19th Century; emphasizes the major social, economic, and political developments of the imperial period. Not open to those who have taken 220. Prerequisite: 101. One semester, 3 credits.

## 323* Modern China

History of modern China, 1600 to the present; the impact of imperialism on traditional Chinese society, the Taiping Revolution of the mid19th Century, revolutionary development in the early 20th Century; history of the Chinese Communist movement from 1921 to 1949; and history of the People's Republic of China. Prerequisite: 101 or 220 . One semester, 3 credits.

## 329* Modern Japan

Major social, political, economic and intellectual developments in Japan from the 17th century to the post-World War II era; the transition of Japan from an agrarian to an industrial society; the nature and social costs of Japanese capitalism; the expansionist thrust; the breakdown of the state in the 1920 s and 1930s. Prerequisite: 101 or 220 . One semester, 3 credits.

## Europe

360* Race, Class and Gender, in Modern Europe Explores the history of the categories of race, class, and gender in Europe since the late eighteenth century through the present, and the manner in which those categories have both enabled and circumscribed human actions and state policies. Examines theoretical approaches to the study of race, class, and gender; historical processes and events that employ race, class, and gender; and historical events that question conventional understandings of race, class, and gender. Prerequisite: 101, 201, or instructor permission. One semester, 3 credits.

## 362* The European City

Introduces students to the development and changing character of European cities in the modern era. Discussion of how and why cities were built and rebuilt, how they were represented and understood as places of danger and possibility, how people lived in and moved through them, how different social groups seized access to the urban environment, and how cities were understood as causing social problems and changing social behaviors. Prerequisite: 101, 201, or instructor permission. One semester, 3 credits.

## 363* Socialism and Revolution in Modern Europe

Explores the relationship between socialism and revolution. Begins with the radical idealism of the French Revolution, continues with the utopian socialists of the 1830 s and 1840 s, and then follows socialism and revolution in Europe through the development of Marxism and working-class political organizations, the Paris Commune of 1871, the Russian Revolution of 1917, and the events of May 1968. Prerequisite: 101, 201, or instructor permission. One semester, 3 credits.

## 364* Modern France, 1789-present

Examines French history from the French Revolution to the present. Themes include the Revolution, the rise of republicanism, the modernization of France's economy, the consequences of France's role in the "scramble for Africa," Vichy and its legacy, as well as contemporary questions of nationalism and identity. Prerequisite: 101, 201, or instructor permission. One semester, 3 credits.

## 365* Germany Since 1870

Modern Germany was born with the unification of German territories in 1870. This course follows German people and their politics from 1870 to 1991, through the German Empire, World Wars I \& II, Hitler and the Holocaust, the division of Germany into two nations in 1945 and its reunification after the fall of Communism in 1989. Prerequisite: 101, 201, or instructor permission. One semester, 3 credits.

## Latin America

## 342* Gender and Sexuality in Latin American History

An exploration of sexual difference and sexuality among women and men in Latin American history. Focusing on the relationship between the family and the state, the course will investigate such themes as patriarchy and paternalism, gendered forms of labor and political organization, feminism, and machismo and masculinity. Prerequisite: 101, 242 , or 246 . One semester, 3 credits.

## 346* History of the Caribbean

An examination of the region's history from the period of European exploration to the present. Thematic emphases on the attempts by Caribbean societies to forge autonomous political and economic units and the struggles of Caribbean peoples to come to terms with the ethnic and racial diversity that characterizes the island populations. Through these prisms, the course will explore such issues as colonialism, monoculture, slavery, emancipation, national independence movements, and tourism. Prerequisite: 101, 242 , or 246 . One semester, 3 credits.

## 347* Modern Mexico

The history of Modern Mexico from the 1880s to the 1990s. Topical focus on revolution, state formation, modernization, identity, immigration and cultural formations and
practices. Prerequisite: 101, 246, or instructor permission. One semester, 3 credits.

## 348* U.S.-Mexico Border Studies

The history of the US-Mexican border from its creation in the mid-19th century to the beginning of the 21st century. Special focus on how the creation of a border creates political, social, and economic spaces that promote cultural formations and human endeavors that are hybrid amalgamations with many (often-conflicting) sources of inspiration. Prerequisite: 101, 246, or instructor permission. One semester, 3 credits.

## 349* African American Diasporas

This course will explore the history of the connections that Afro-Latin Americans and Afro-North Americans have created in the nineteenth and twentieth centuries. Ultimately, the course will interrogate the historical possibilities and limitations of conceiving of African Americans as a hemispheric, transnational social group. Prerequisite: 101, 242 , or 246 . One semester, 3 credits.

## United States

## 300* Colonial America

The European, Native American, and African backgrounds, experiences, and evolving institutions of the English colonies in North America from the initial contact of peoples to the establishment of a mature provincial society. Prerequisite: 206. One semester, 3 credits.

## 302 Frontiers in America

This course looks at the history, from discovery until the 1850s, of America's "frontiers." We will explore the meanings both popular culture and historians have applied to the word frontier, from a boundary between civilization and barbarism to a zone of cultural exchange and interaction. We will look at regions such as New England, Louisiana, New Mexico, and the Great Lakes area to try to understand the different ways settlers, slaves, and Native Americans interacted in America's founding years. Prerequisite: 206 or instructor permission. One semester, 3 credits.

## 306* Recent United States

Traces the history of the United States from World War II to the present. Topics include the emergence of the Cold War, social and cultural trends in the fifties and sixties, liberation movements of the sixties, Vietnam, and the rise
of modern conservatism. Prerequisite: 207 or instructor permission. One semester, 3 credits.

## 309* Women, Family, and Work in the Modern U.S.

Historical investigation of women's daily experiences and of ideas of femininity and masculinity in the U.S. with a focus on motherhood, labor, sexuality, and social movements. Prerequisite: 206, 207 or instructor permission. One semester, 3 credits.

## 310 Slavery in North America

This class investigates the history of slavery and forced labor in America before 1860. We will study such topics as Indian slavery, the transatlantic slave trade, the development of African cultures in America, and the antislavery movement. We will try to understand the diversity of slavery and slave cultures in North America's different regions as we assess the central role slavery played in the creation of American society. Prerequisite: 206 or instructor permission. One semester, 3 credits.

## 311 Native American History

This course looks at the native peoples and cultures of North America and their history from ancient times to the present day. Prerequisite: 101,206 , or 207 , or instructor permission. One semester, 3 credits.

## 316* Urban Encounters: The City in US History

The history of U.S. cities and suburbs from the late nineteenth century to the present. Topics include housing, public policy, transportation, gender, race and ethnic relations in the city, and urban popular cultures. Field trips included. Prerequisite: 207 or instructor permission. One semester, 3 credits.

## Theory and Methods Seminars

## 50 Internship

Professionally supervised work or service learning at sites chosen to further the student's history major and career choices. May be repeated only once for credit. Permission. One semester, 1-3 credits.

## 60 Preceptorship in World History

A one-semester course taken in the junior or senior year designed to give a student experience as a teaching assistant. Students can work with Whittier faculty or off-campus teachers who offer world history courses.

Other teaching or tutoring experiences may count as a preceptorship. Intended for those students who want to teach secondary school or to enter a graduate program in history. Prerequisite: 101 and Junior standing. Permission. One semester, 1 credit.

## 61 Preceptorship in U.S. History

A one-semester course taken in the junior or senior year designed to give a student experience as a teaching assistant. Students can work with Whittier faculty or off-campus teachers who offer U.S. history courses. Other teaching or tutoring experiences may count as a preceptorship. Intended for those students who want to teach secondary school or to enter a graduate program in history. Prerequisite: 206 or 207 and Junior standing. Permission. One semester, 1 credit.

## 280 History and Theory

How do historians know what happened in the past? Can they know? What are the most important ways in which historians approach understanding and interpreting the past? This seminar explores those questions through reading and discussing significant works by and about historians. Prerequisite: 101 or any other 200 -level course. One semester, 3 credits.

## 380 Historical Methods

Introduction to methods of historical research and writing. Students will produce a major research paper. For those pursuing a history major and others interested in developing basic skills. Prerequisite: 280. One semester, 3 credits.

## 480 Capstone Seminar

Significant contributions to the history and theory of the processes creating the modern world are read and discussed. For history majors and others in the social sciences or humanities. Prerequisites: 380 . One semester, 3 credits.

190, 290, 390, 490* Selected Topics in History
Variable credits. Permission. May be repeated for credit.

## 295, 395, 495 Independent Studies

Credit and time arranged. Permission. May be repeated for credit.

[^1]
## COURSE DESCRIPTIONS (INTD)

## 11 Quaker Campus Workshop

Experience working on the student newspaper, The Quaker Campus. Writing articles, editing copy, doing layout and design, taking photographs, and learning about issues in journalism. May be repeated for credit. One semester, 1 credit.

## 12 Acropolis Workshop

Experience working on the yearbook, The Acropolis. Editing and writing copy, doing layout and design, taking photographs, and learning business management skills. May be repeated for credit. One semester, 1 credit.

## 13 Career Planning for Freshmen and Sophomores

An introduction to career-life planning. The course focuses on self-assessment, exploration of career and college majors, career decision making, exploration of internships and career preparation. The course is recommended for freshman and sophomore students who are undecided about their academic major and/or future career options. One semester, 1 credit.

## 14 Career Planning for Juniors and Seniors

Career-life planning course for students interested in defining their career goals and preparing for graduate school/job search. The course focuses on career selection, career and graduate school preparation and job search strategies. The course is recommended for sophomores, juniors and seniors. One semester, 1 credit.

## 15 Leadership and College Student Development

Personal development; interpersonal skills; peer-counseling; student development; assertiveness; values exploration; leadership and program development skills; and special issues related to college students in residence. Open to all students, but those interested in applying for a Residential Life staff position must enroll in course. One semester, 1 credit.

## 33* Teaching Composition

This course is designed to provide training in the techniques of teaching secondary and college-level writing. Students will follow the progress of the instructor's ongoing Freshman Writing Seminar from the initial, "diagnostic" essay to the final research paper, learning how the instructor structures a writing course
through both reading and writing assignments and classroom exercises, as well as techniques of individual tutoring. This course is required training for students who wish to work at the Campus Writing Center, students interested in secondary and college-level teaching would also find it helpful. May be repeated for credit. One semester, 1 credit.

## 34* Peer Mentorship and Educational Leadership

An introduction to concepts and theories on peer mentoring and leadership in education as well as related topics including: confidentiality, advising, conflict, cultural sensitivity, student success and retention. Prerequisite: INTD100. One semester, 1 credit.

## 53* Introduction to Radio Broadcasting

 Experience working as a Disc Jockey at KWTR, the campus radio station. Select and introduce music, operate broadcast equipment, read promotional announcements, complete program logs, and generate listenership and income for the station. Learn about the issues facing radio and the recording industry. May be repeated for credit. One semester, 1 credit.
## 55* Radio Hosting

This course will be held exclusively at Whittier College Radio Station. Each week students will have a chance to perform on the microphone and receive constructive critiques on each performance. To mirror the review process encountered by hosts at actual radio stations, each performance will be "air-checked" and analyzed. Each session will focus on different areas and genres in radio. Prerequisite: INTD 053. One semester, 2 credits.

## 90* Introductory Writing Seminar

Students learn critical reading skills for college level texts. These texts are the basis for assignments which teach fundamental college writing skills: thesis development, organization of ideas, basic argumentation and exposition, and mechanics. Emphasis is placed on helping each student develop a viable writing process. One semester, 3 credits. (for more information see the College Writing Program, Page 77)

## 95 Mentor Seminar

Credit and time arranged. Permission. May be repeated for credit.

## 100 Seminar: Introduction to College Writing

Students read complex texts chosen to sharpen students' critical reading and thinking skills. Texts frame a central course theme. Writing assignment based on these texts are designed to teach and practice persuasion, description, narration, exposition, and research-based writing, as well as writing under pressure of time. Extensive revision is emphasized. Prerequisites: INTD 90 or permission based on SAT verbal and high school GPA scores. One semester, 3 credits. (for more information see the College Writing Program, Page 76)

## $101 *$, 102 The Western Mind I, II

This sequence is a survey of the artistic, philosophical, religious, and scientific history of Western Civilization from the Greeks and Hebrews to the 20th Century. Rather than giving more or less equal coverage to all periods, the course is structured around the periods and places within which there was the initial articulation or testing of major concepts, values, and institutions, such as Athens in the 5th century B.C. and Paris in the 13th century. Through both semesters, the goal is to provide a basis for understanding such ambiguous terms as "order," "classicism," "realism," "romanticism," "reason," and "naturalism." Two semesters, 3 credits each.

## 125* American Intellectual and Cultural History I

This course examines the early colonial forms of religious and political idealism from the Enlightenment revolutionary rationalism and its reactions (including rural and frontier revivalism), to the increasing American regionalism and the role of slavery in the formation of American ideas through the Civil War. Analyzes the shaping significance of African-American spirituals or "sorrow songs". One semester, 3 credits.

## 126* American Intellectual and Cultural History II

Continuation of INTD 125. Explores the materialism of the "Guilded Age", the emergence of Jazz and Blues, the rise of Feminist thought, pragmatism, and the ways in which reconstruction creates and continues intellectual divides. As the course moves to the 20th century the course looks at various forms of rethinking American ideas, the intellectual foundations for and cultural ethos
of the 60's, and the increasing diversity of the ideas influenced by immigration. Prerequisites: INTD 125. One semester, 3 credits.

## 200* Integrative Course for Women's Studies

An introduction to basic Women's Studies, concepts and theories, drawing on methodologies and content of multiple disciplines. The course will explore differences as well as commonalities of women's experiences and will provide a foundation for more advanced work in Women's Studies. One semester, 3 credits.

## 215 Special Topics in Science/Math Contexts

216* Population Problems and Policy This course provides an opportunity to develop quantitative skills in the analysis of population processes and in the formulation of policies attempting to intervene in these processes or to take them into consideration within other public and private sector policy arenas. The course will be of particular relevance to those interested in actuarial science, in environmental sustainability, in social policy, and in urban and other governmental and service planning processes. We examine the necessity, techniques, and precariousness of demographic projections in such arenas. The course will assume prior completion of the Quantitative Reasoning (QR) and Introductory Laboratory Science (ILS) requirements, or their equivalence for WSP and transfer students. Crosslisted with Sociology 358. One semester, 4 credits.

## 217* Search for Extraterrestrial Life

Does life exist elsewhere in the universe? This course examines this question in detail, from the possibility of fossil bacteria existing on Mars to the possibility of advanced races colonizing the galaxy. Topics studied include: the detection of planets around other stars, the evolution of life and intelligence on Earth, the search for life in our Solar System, radio astronomical searches for extraterrestrial intelligence, and UFO and alien abduction phenomena. One semester, 4 credits.

## 219* Health and Human Diseases

The course examines AIDS from a biological, sociological, and economic viewpoint. The biology focuses on the cause of AIDS, the impact of AIDS on the human body, and the current treatments for the disease. The course then focuses on the factors that have made AIDS such a widespread disease in Africa and the economic and sociologic impact of the disease in various countries in Africa. Finally the course explores other human diseases such as cancer, heart disease, and other diseases of interest to students. One semester, 4 credits.

## 221* Global Climate Change <br> One Semester, 4 credits.

## 225, 226 Arabs and Muslims

The course traces the rise of Islam from Muhammad to the Ottoman Empire, along with analyses of the contemporary scene in the Arab World. Two semesters, 3 credits each.

## 227* Math Models and Computer Simulations

In this course, you will learn some of the modern ways in which researchers use mathematics and computers to investigate realworld phenomena such as population growth, spread of diseases, and oil flow through porous rock. You will gain hands-on experience by applying some of these techniques to explore specific examples chosen from several different fields of study. One semester, 4 credits.

## 228* Technological and Societal Change

Sir Isaac Newton once said: "If I have seen so far, it is not because of my greatness, but because I have stood on the shoulders of giants." In this course, we will view the landscape of technological development from the shoulders of Georg Ohm, Michael Faraday, Albert Einstein and Neils Bohr, and will discuss the historical development of this landscape as it has been modified by (and in its turn influenced) changes in society. One semester, 4 credits.

## 241* Sport, Play, and Ritual

This course attempts to study the role of sport, play, and leisure in the religious life of the individual and the community at large. Some of the important questions to be investigated are: What role does sport play in spiritual life? Is it making life more meaningful? What does this mean to contemporary religion? January, 4 credits.

## 278* Culture and Medicine

This course focuses on the role of culture in medicine. Topics include the cultural attitudes of physicians, cultural impacts on the treatment of patients and patient expectations. One semester, 3 credits, or January, 4 credits.

## 299 Internship

This is a planned and supervised academicallyrelated hands-on experience that allows students to explore professional options in cooperating businesses, industry, non-profit organizations or government agencies. The onsite responsibilities and projects will provide skill and knowledge development. The student is required to create a learning plan that includes measurable objectives, maintain a regular schedule of work hours each week, attend biweekly internship seminar, complete a series of in-class and on-site assignments, and produce a reflective summary paper and presentation. Not open to first semester freshmen. Variable credits. Permission. Credit/No Credit grade only. May be repeated for credit.

## 345 An Introduction to Denmark

An introduction to life in Denmark, Danish history, politics, economics, culture, social policy and life-style, as preparation for a semester in Copenhagen. One semester, 1 credit.

## 380 International Studies

Students participating in Whittier College's Study Abroad programs will register for this course during their semester student. One semester, 12 credits.

190, 290, 390, 490* Selected Topics
Variable credits. Permission. May be repeated for credit under a different subject.

## 295, 395, 495 Independent Studies

Credit and Time arranged. Permission. May be repeated for credit.

## NATURAL SCIENCE (NASC)

## 200* Physical Science for Teachers

An introductory course covering the basic principles of the physical sciences, with emphasis on the fields of chemistry and physics. Designed for students who are obtaining a Multiple Subjects Credential and will be taking the CSET. Prerequisite: CHDV 105 or concurrent enrollment. One semester, 2 credits.

[^2]
## KINESIOLOGY AND LEISURE SCIENCE

Kathy A. Barlow

Ann Hickey
Patricia Van Oosbree, Chair

$\tau$study of Kinesiology, as human movement, has changed significantly in recent years. While Physical Education continues to encompass the preparation of teachers for motor skills, the scientific disciplines of Movement Anatomy, Biomechanics, Motor Learning/Motor Control and Exercise Physiology have gained prominence as necessary aspects for a complete curricula. Society, with more free time and stress, is demanding more from recreation.
Students can major or minor in kinesiology while emphasizing one of the three options: teaching pedagogy, sport and recreation management or pre-physical therapy. The major can be completed without an emphasis as well. Students with degrees in Kinesiology often pursue credentialing programs for Teacher Education, further professional training in Physical Therapy and Athletic Training, or graduate studies in Exercise Science and Sports Management.
The department offers activity courses in individual, dual, and team sports.

## GUIDELINES FOR A MAJOR IN KINESIOLOGY AND LEISURE SCIENCE

A minimum of 30 credits including the following core:
First Aid, KLS 125, 1 credit
Movement Anatomy, KLS 150, 3 credits
Biomechanics, KLS 311, 4 credits
Exercise Physiology, KLS 313, 4 credits
History and Philosophy, KLS 340, 3 credits
Motor Learning and Control, KLS 440, 4 credits
Seminar in Kinesiology and Leisure Science, KLS 489, 2 credits
Choice of one:
Sociology of Sport and Leisure, KLS 382, 3 credits
Psychology of Sport and Leisure, KLS 435, 3 credits

Areas of Emphasis
Teaching Pedagogy: Designed for those interested in teaching physical education. Requirements include the completion of the departmental core and $15,25,89,160,170,215,315,316,320,325,350,373,420$. For teaching credential requirements: See Education.
Sport and Recreation Management: Designed for those interested in serving in public or private agencies dealing with recreation and sport. The courses include the completion of the Departmental core as well as 12 credits selected from 92, 315, 373, 382, and 388. Required business courses include BSAD 100, 320, 330 and one elective.
Pre-Physical Therapy: Designed for students interested in physical therapy. Requirements include completion of the departmental core and BIOL 100 and 300A/B; PHYS 135 A \& B; PSYC 100; CHEM 110A/B; MATH 80; a 3 credit developmental psychology elective; and KLS 92. Students should also consider taking MATH 139A or MATH 141A. Electives should be carefully selected with advisor's guidance about current requirements for entry to the physical therapy programs of choice.

Students interested in pursuing graduate degrees in the specialized subjects of Biomechanics, Exercise Science, Leisure Studies, Motor Learning or Sport Psychology should consult with their academic advisor.
A minimum of 20 credits, including: 125, 150, 311, 313 and 440 , with 4 credits of advisor-approved electives.

## COURSE DESCRIPTIONS (KLS)

## Theory Courses

## 125 First Aid

Principles of first aid and emergency accident management. May be repeated for credit. One semester, l credit.

## 150 Movement Anatomy

Basic anatomical principles concerned specifically with human performance analysis. One semester, 3 credits.

## 160* Individual Sports Teaching and Coaching

Teaching and coaching methodologies for individual sports commonly taught at the secondary school level, such as tennis, track and field, swimming, badminton, archery, and golf. One semester, 3 credits.

170* Team Sports Teaching and Coaching Teaching and coaching methodologies for team sports commonly taught at the secondary school level, such as soccer, volleyball, basketball, softball/baseball, and touch football. One semester, 3 credits.

## 201 Fundamentals of Nutrition

An introduction to human nutrition: structure, function, sources of nutrients, and the recommended daily allowances. One semester, 3 credits.

## 215 Analysis of Dance and Creative Movement

Fundamentals of folk, square, social and modern dance and creative movement; teaching techniques applicable to dance instruction. One semester, 2 credits.

## 311 Biomechanics

Anatomical and mechanical principles relating to human motion. Lecture and laboratory. Prerequisite: 150. One semester, 4 credits.

## 313 Exercise Physiology

The effects of exercise and stress upon the various organic functions. Lectures and laboratory. Prerequisite: 150 . One semester, 4 credits.

## 315* Outdoor Recreation

Basic techniques and resources available for camping, hiking, backpacking, mountaineering, and water-related recreation activities. One semester, 3 credits.

## 316* Care and Prevention of Athletic Injuries

Treatment procedures for athletic injuries, preventive and therapeutic conditioning, and safety in sport. Prerequisite: 150 . One semester, 3 credits.

## 320 Movement and Elementary School Physical Education

The biological, psychological, and sociological interpretations of play and physical education. Fundamentals of teaching movement at the preschool and elementary level. Includes laboratory experience. One semester, 3 credits.

## 340 History and Philosophy of Sport and Leisure

The historical and philosophical development of sport and leisure within the context of the discipline and human cultural development. One semester, 3 credits.

## 350* Adaptive Physical Education

Exercise and adaptations necessary for the needs of the physically and mentally challenged. Prerequisite: 150. One semester, 2 credits.

## 373* Sport and Recreational Management

Administrative aspects of athletics, physical education, and recreation are studied and put into practice. One semester, 3 credits.

## 382* Sociology of Sport and Leisure

 Impact of culture on the rise of games and sports in human societies. One semester, 3 credits.
## 388* Sport, Play and Ritual

(Same as INTD 241) January session, 4 credits.

## 420* Statistical and Evaluative Methods

Parametric and nonparametric statistics used as a means of analyzing sport skills and the sport sciences. Correlation, probability, analysis of variance and measures of central tendency and variability, represent statistical analysis covered. One semester, 3 credits.

435* Psychology of Sport and Leisure Psychological factors related to human performance and leisure activity. Individual and team functions of arousal, skill level, cohesion, social facilitation, and attention are among the areas studied. One semester, 3 credits.

## 440 Motor Learning and Control

Theoretical study of the change in motor skill behavior as a result of practice and experience, as well as the reflexive and voluntary mechanisms that control human movement Lecture and laboratory. One semester, 4 credits.

## 489 Seminar In Kinesiology and Leisure Science

Training and practice in the preparation and presentation of oral and written reports on the topics pertaining to the subfields in Kinesiology and Leisure Science. Open to seniors majoring in KLS. One semester, 2 credits.

509 Promoting Students' Health and Safety An examination of the major laws, concepts, and principles related to student health and safety and a discussion of strategies that foster student health and contribute to a healthy learning environment. Topics include: impact of health on academic achievement, student behaviors which foster or compromise their health and safety; common chronic and communicable diseases; strategies for encouraging good nutrition; physiological and sociological effects of alcohol, narcotics, drugs, and tobacco. One semester, 1 credit.

## General Courses

## 1 Fitness and Wellness

Discussion and laboratory experience covering fitness components (flexibility, endurance, strength, body composition) and wellness components (proper nutrition, risk factor reduction, stress management). Primary objective is to provide students with the skills and behaviors to maintain a high level of fitness and health throughout life. One semester. 1 credit.

## 15 Combatives

An introduction to the principles and techniques of the five basic forms of Tae Kwon Do Karate. One semester. 1 credit.

## 89 Field Work Experience in Secondary Education <br> One semester, l credit.

92 Field Work in Kinesiology and Leisure Science
Experience in college and private settings. Permission. May be repeated for credit. One semester, 1 credit.

190, 290, 390, 490* Selected Topics in KLS Variable credits. Permission. May be repeated for credit.

295, 395, 495 Independent Studies
Credit and time arranged. Permission. May be repeated for credit.

## *Activity Classes

2 Aerobics
3 Advanced Aerobics
4 Pilates (same as THEA 4)
5 Yoga (same as THEA 5)
7 Self Defense for Women (R. A. D.)
8 Step Aerobics
9 Advanced Step Aerobics
10 Weight Training
11 Advanced Self-Defense for Women
15 Combatives
20 Pickleball
21 Badminton
25 Swimming
26 Tennis
30 Indoor Soccer
32 Basketball
34 Soccer
35 Softball
36 Volleyball
38 Bowling
*Not all the activity classes listed are offered each year.

## INTERCOLLEGIATE ATHLETICS

Participation in intercollegiate athletics carries one credit per semester and may be repeated for credit. These sports are: Women's Intercollegiate Basketball, Cross Country, Lacrosse, Soccer, Softball, Swimming, Tennis, Track \& Field, Volleyball, Water Polo; Men's Intercollegiate Baseball, Basketball, Cross Country, Football, Golf, Lacrosse, Soccer, Swimming, Tennis, Track \& Field, Water Polo.
*Not offered every year.

Fritz Smith (Mathematics), Associate Dean of Faculty and Coordinator of the Liberal Education Program
THE LIBERAL EDUCATION CURRICULUM
Statement of Educational Values and Objectives:

TRLiberal Education Program provides an academic framework for collaboration and transformation within the community that is Whittier College. Through the Liberal Education Program, Whittier College prepares students to solve problems and communicate ideas in an increasingly complex and interdependent world community. It does this through its emphasis on cultural perspectives and the importance of connections between different fields of knowledge. Both critical thinking (the development of the skills and methods necessary for systematic investigation - i.e. the ability to define, analyze, and synthesize using a variety of methods and technologies) and the practical application of knowledge inform all elements of the program and are central to the transformation that distinguishes Whittier College graduates.

## Learning Goals

I. Students should develop the ability to make connections across disciplines in order to understand the convergence and divergence of different fields of knowledge and to understand the nature of an academic community.
II. Students should develop an understanding of, and competency in, the use of signs and symbols to construct, create, perceive, and communicate meaning.
III. Students should develop the capacity to entertain multiple perspectives and interpretations.
IV. Students should develop an understanding of culture and the connections between themselves and others in relation to physical, historical, social, and global contexts.
V. Students should develop breadth, defined as familiarity with essential concepts in major fields, and depth, defined as knowledge of at least one field (usually achieved in the major).

Requirements for Graduation through the Liberal Education Program In order to graduate through the Liberal Education Program students must:

- Complete the requirements listed in the core framework below.
- Complete the requirements for a Major.
- Complete 120 units of coursework (Major courses, core courses and elective courses). Out of these 120 units, six units, from at least two departments, must come from each of the three Divisions (Natural Science, Social Science and Humanities/Fine Arts). This will be referred to as the Breadth Requirement (18 credits).


## The Liberal Education Core Requirements

The core requirements are contained in a framework of four elements

- Community
- Communication
- Cultural Perspectives
- Connections

The core requirements are as follows:
Community ( 6 credits)

- Freshman Writing Seminar linked with another course (Fall, Freshman Year, 6 credits)


## Communication (9 credits)

- Quantitative Reasoning, 3 credits
- Writing Intensive Course, 3 credits
- Creative and Performing Arts, 2 credits

The Creative and Performing Arts requirement may be satisfied by a single course of two or more units or by two courses of one unit each.

- Senior Presentation, 1 credit


## Cultural perspectives ( 12 credits)

One course each from four of the following seven areas:

1. African
2. Asian
3. Latin American
4. North American
5. European
6. Crosscultural
7. Languages

## Connections ( 10 credits)

- Two Paired courses or a sequence of two team-taught courses, 6 credits
- A course that integrates scientific and mathematical methods and ideas with analysis of cultural or societal issues, 4 credits
Once a student has matriculated at Whittier College, course work taken at other institutions (except Whittier College Foreign Studies programs) cannot be used to satisfy the Liberal Education requirements.
Courses taken in a semester-length study-abroad program may be applied to the Liberal Education requirements, as specified in the catalog description of Whittier Foreign Study Programs. Courses from foreign study programs must be approved in advance by the Registrar, based on guidelines developed by the Liberal Education Committee.

Credit received for Advanced Placement (AP) from high school may be used to satisfy Liberal Education requirements.
AP credit in Art History will satisfy the European requirement.
AP credit in English will satisfy the Freshman Writing Seminar requirement.
AP credit in History will satisfy either the American and/or European requirement.
AP credit in Mathematics will satisfy the Quantitative Reasoning requirement.
AP credit in Music or Studio Art will satisfy the Creative and Performing Arts requirement.

Credit received for International Baccalaureate (IBC) from high school may be used to satisfy Liberal Education requirements in the same way as Advanced Placement credit.

Courses which meet the guidelines for more than one category may satisfy requirements for each of those categories concurrently. Courses used to satisfy Liberal Education requirements may also be used to satisfy requirements in other areas-such as majors, minors, and credentialing programs.

When a student fails to complete satisfactorily a paired set of courses, the student must then complete a different pair to satisfy that part of the Liberal Education Program.
A student may satisfy both high school deficiencies and Liberal Education requirements with the same course.

## Graduation Requirements for Students with Transfer Credits

All requirements for graduation apply, as stipulated above, with the exceptions indicated below. The Registrar of Whittier College will determine which credits transferred from another institution may be used to satisfy each requirement. Adjustments of the Graduation Requirements (based on Undergraduate Standing at entrance): Liberal Education Requirements: All students with transfer credits, regardless of the number of transfer credits that satisfy Liberal Education Program requirements, must complete the Connections I requirement at Whittier. At least twelve credits in the major must be taken at Whittier College.

Sharad Keny<br>Mark Kozek<br>Jeffrey Miller<br>Jeff Lutgen, Chair<br>Adrian Riskin<br>Fritz Smith

MEathematics is one of the original liberal arts and serves as the foundation underlying much of modern science and engineering. It is a rigorous discipline, but one in which a creative mind can flourish and excel. Graduates with a mathematics major generally work in business or industry, teach, or pursue graduate studies in mathematics or operations research. The Mathematics Department offers courses designed to prepare majors for their pursuits and courses designed to serve the needs of non-mathematics majors. Given their reputation for improving one's logical reasoning abilities, mathematics courses attract many non-mathematical majors.
All new students, except those with AP calculus or AP statistics scores of 4 or higher or college level mathematics transfer credit, must take the Mathematics Placement Examination to determine their mathematical preparation for placement in Whittier College mathematics courses.
The Liberal Education Program mathematics (quantitative literacy) requirement can be satisfied by taking MATH 79, 80, 81, 85, 139A, 139B, 141A, 141B, 220, or 241; PHYS 100 or 101; PSYC 314; or by advanced placement credit.
Students in Chemistry, Mathematics, Physics, or Pre-Engineering should begin the calculus sequence in the freshman year. Those not prepared to do so during the first term should begin with 76 or 85 , depending on their preparation.
The department also participates in an interdisciplinary Mathematics-Business major, and the 3-2 Engineering Program.

## GUIDELINES FOR A MAJOR IN MATHEMATICS

In addition to the Major in Mathematics, the department offers a Major in Mathematics with Teaching Credential Emphasis for students who plan to teach high school mathematics. Teaching Credential students should contact the Department of Education and Child Development for more information on obtaining an appropriate California teaching credential.
Students who plan to enter a graduate program in mathematics should take more than the minimum number of mathematics courses; these students should work closely with an advisor from the Department of Mathematics to choose appropriate additional mathematics courses.

Core courses for both options:
Calculus and Analytic Geometry I, MATH 141A or
Integrated Precalculus/Calculus, 139A,B, 4--7 credits
Calculus and Analytic Geometry II, MATH 141B, 4 credits
Calculus and Analytic Geometry III, MATH 241, 4 credits
Elementary Applied Linear Algebra and Differential Equations, MATH 242, 3 credits
Abstract Thinking, MATH 280, 3 credits
Linear Algebra, MATH 380, 3 credits
Senior Seminar, MATH 491A,B, 4 credits

## I. Major in Mathematics

In addition to the core courses, this option requires six additional mathematics courses, five of which must be at the 300 level or higher. These six courses must include at least one course from each of groups A, B, and C below. In addition, at least two of these six courses must be on the list of Abstract Courses below.
A. Analysis and Geometry Courses (at least one)

Advanced Geometry, MATH 320, 3 credits
Complex Variables, MATH 344, 3 credits
Point Set Topology, MATH 360, 3 credits
Introduction to Analysis I, MATH 440A, 3 credits
Introduction to Analysis II, MATH 440B, 3 credits
B. Algebra and Discrete Mathematics Courses (at least one)

Discrete Mathematics, MATH 220, 3 credits
Number Theory, MATH 305, 3 credits
Modern Algebra I, MATH 480A, 3 credits
Modern Algebra II, MATH 480B, 3 credits
C. Applied Mathematics Courses (at least one)

Probability and Statistics, MATH 315, 3 credits
Differential Equations I, MATH 345A, 3 credits
Differential Equations II, MATH 345B, 3 credits
Numerical Analysis, MATH 350, 3 credits
Mathematical Modeling, MATH 354, 3 credits
Quantum Mechanics, PHYS 350, 3 credits
or another upper-division Mathematics course or an upper-division course in another department. This course must be for at least 3 credits, involve an application of mathematics to another field, and be approved by the Mathematics Department faculty.

At least two of the six courses beyond the Core Courses must be on the following list of Abstract Courses:

Advanced Geometry, MATH 320, 3 credits
Point Set Topology, MATH 360, 3 credits
Introduction to Analysis I, MATH 440A, 3 credits
Introduction to Analysis II, MATH 440B, 3 credits
Modern Algebra I, MATH 480A, 3 credits
Modern Algebra II, MATH 480B, 3 credits

## II. Major in Mathematics with Teaching Credential Emphasis

In addition to the core courses, this option requires the following eight courses:
Computer Science I, COSC 120, 3 credits
Discrete Mathematics, MATH 220, 3 credits
Number Theory, MATH 305, 3 credits
Probability and Statistics, MATH 315, 3 credits
Advanced Geometry, MATH 320, 3 credits
History of Mathematics, MATH 400, 3 credits
Introduction to Analysis I, MATH 440A, 3 credits
Modern Algebra I, MATH 480A, 3 credits

## GUIDELINES FOR A MINOR IN MATHEMATICS

A minor in mathematics requires 20-23 credits: MATH 139A,B or MATH 141A; MATH 141B; MATH 242; MATH 280; and 6 credits of upper-division Mathematics courses.

## COURSE DESCRIPTIONS (MATH)

## 74 Transition to College Mathematics

Intended to prepare students for MATH 79 or 80 . Students also expecting to take 81 or 85 should take 76 instead. Arithmetic and Algebraic operations; number systems and notations; unit conversion; creating and interpreting graphs; basic geometry; other topics requisite for college level mathematics. (Not open to those who have had 76, 79, 80, 81, $85,139 \mathrm{~A}$, or 141A.) One semester, 3 credits.

## 76 College Algebra

Intended to prepare students for MATH 79, 80, 81 , or 85 , or PSYC 314. Basic properties of real numbers, linear equations and inequalities, quadratic equations, graphs of linear equations, and inequalities, systems of linear equations, conic sections. (Not open to those who have had 81, 85, 139A or 141A.) One semester, 3 credits.

## 79 Quantitative Reasoning

This course is designed to help students develop their ability to create, analyze, and communicate quantitative and scientific arguments. It will emphasize critical thinking and problemsolving skills while also giving students practice in computation and symbolic manipulation. Topics to be covered include elementary linear
equations, polynomial modeling, working with and understanding graphs and graphical presentations, and elementary probability and statistics. These topics will be presented in the context of applications and models from various disciplines. (Not open to those who have had $81,85,139 \mathrm{~A}$, or 141A. Does not satisfy the prerequisite for MATH 81 or 85 or PSYC 314.) Prerequisite: 74 or 76 , or sufficient score on Math Placement Exam. One semester, 3 credits.

## 80 Elementary Statistics

Descriptive Statistics: descriptive measures, probability concepts, discrete random variables, normal distribution. Inferential Statistics: sampling distributions, confidence intervals, hypothesis testing, Chi-square procedures, linear regression. Emphasis on methodology rather than theory. (Not open to those who have had 315.) Prerequisite: 74, 76, or 79 , or sufficient score on Math Placement Exam. One semester, 3 credits.

## 81 Mathematics for the Management Sciences

Functions, matrices, linear systems, linear programming, logarithmic and exponential functions, limits, differential calculus. Prerequisite: 76 or sufficient score on math placement exam. (Not open to those who have had 85, 139A or 141A.) One semester, 3 credits.

## 85 Precalculus Mathematics

Solutions of algebraic equations and inequalities; functions and graphs; exponential, logarithmic and trigonometric functions; plane analytic geometry. Recommended for those who plan to take the Calculus sequence but who did not score sufficiently high on the Math Placement Exam. (Not open to those who have had 81, 139A or 141A.) Prerequisite: 76 or sufficient score on Math Placement Exam. One semester, 3 credits.

## 139 A,B Integrated Precalculus/Calculus

 Calculus I with a review of Precalculus. Topics include: functions of one real variable and their graphs, various types of functions (polynomials, rational functions, exponential, logarithmic, trigonometric, and discrete functions) derivatives of these functions, applications of derivatives, introduction to integrals of functions, Riemann Sums. MATH 139A and 139B together are equivalent to MATH 141A. Prerequisite: 85 or sufficient score on Math Placement Exam. Fall, 4 credits; January, 3 credits.141 A,B Calculus and Analytic Geometry I-II
First two semesters of a three-semester unified course in analytic geometry and calculus: progresses from functions of one real variable, their derivatives and integrals, through multivariate calculus; topics from infinite series and differential equations. Prerequisite: 85 or sufficient score on Math Placement Exam. Two semesters, 4 credits each.

## 220* Discrete Mathematics

Sequences; recursion and recurrence relations; finite-state automata; elementary set theory; graphs and trees; elementary probability and combinatorics. Prerequisite: Sufficient score on Math Placement Exam. One semester, 3 credits.

## 241 Calculus and Analytic Geometry III

Continuation of 141 A, B. Unified course in analytic geometry and calculus: progresses from functions of one real variable, their derivatives and integrals, through multivariate calculus; topics from infinite series and differential equations. Prerequisite: 141B. One semester, 4 credits.

## 242 Elementary Applied Linear Algebra and Differential Equations

Matrices and determinants, systems of linear equations, vector spaces, linear transformations, eigenvalues, first-order and second-order differential equations, systems of linear differential equations, Laplace transforms. Prerequisites: 141B, and 280 or concurrent enrollment in 280 . One semester, 3 credits.

## 280 Abstract Thinking

Designed to bridge the gap between lower-and upper-division mathematics courses. Deals with sets, applications of logic, propositional and predicate calculus, techniques of mathematical proofs, relations, functions, number systems, mathematical induction, algebraic structures. Prerequisite: 141B. One semester, 3 credits.

## 305* Number Theory

Euclidean algorithm; fundamental theorem of arithmetic; multiplicative functions; congruences; Chinese remainder theorem; Euler, Fermat, Wilson, and Lagrange's theorems; diophantine equations. Prerequisites: 141B and 280. One semester, 3 credits.

## 315* Probability and Statistics

Continuous random variables and their probability distributions, marginal and conditional probability distributions, functions of random variables, the Central Limit theorem, estimations; the method of maximum likelihood; hypothesis testing, power of tests, The Neyman - Pearson lemma, regression, linear statistical models, method of least squares. Prerequisite: 241 . One semester, 3 credits.

## 320* Advanced Geometry

Hilbert's axioms for Euclidean geometry; non-Euclidean geometries; finite geometries; isometries in the Euclidean plane.
Prerequisites: 141B, 280. One semester, 3 credits.

## 344* Complex Variables

Algebra of complex numbers, theory and applications of functions of complex variables, contour integrals, conformal mappings, and boundary value problems. Prerequisite: 241. One semester, 3 credits.

## 345* A,B Differential Equations I, II

 The theory of first-and second-order ordinary differential equations including their series solutions, introduction to Laplace Transforms with applications, including the solutions of differential equations, systems of ordinary linear differential equations, introduction to Fourier Series and integrals with applications, difference equations, partial differential equations with applications, introduction to the boundary and initial value problems and their applications. Also other selected topics in ordinary and partial differential equations depending on the particular emphases of the students in the class. Prerequisite: 242. Two semesters, 3 credits each.
## 350* Numerical Analysis

Numerical solutions of non-linear equations; interpolation; curve fitting; and estimation of error. Prerequisite: 242 . One semester, 3 credits.

## 354* Mathematical Modeling

Formulation and evaluation of models; continuous and stochastic models; sources of error; accuracy, precision and robustness; mathematical techniques used in modeling; analytical and numeric solutions; optimization. Prerequisite: 242. One semester, 3 credits.

## 360* Point Set Topology

Metric spaces, sequences, continuity, connectedness, product spaces, separation axioms, compactness, topological spaces. Prerequisites: 241, 280. One semester, 3 credits.

## 380* Linear Algebra

Vector spaces, linear transformations, similarity, eigenvectors, diagonalization, quadratic forms. Prerequisites: 242, 280. One semester, 3 credits.

## 400* History of Mathematics

Selected topics in the development of mathematics will be discussed. A good background in mathematics is needed. Prerequisite: 141B. One semester, 3 credits.

440* A,B Introduction to Analysis I, II Topology of the Reals and Euclidean n-space; compact sets; Heine-Borel and BolzanoWeierstrass Theorems; connected sets; mappings; continuity and uniform continuity; differentiability; uniform convergence; power series; Inverse Function Theorem; Implicit Function Theorem; Integration. Prerequisites: 241, 280. Two semesters, 3 credits each.

480* A,B Modern Algebra I, II
Sets, mappings, relations, operations, algebraic structures (groups, rings, fields, modules), homomorphisms, substructures, quotient structures, finite fields, field extensions, proof of impossibility of some geometric constructions using only compass and ruler, Galois Correspondence. Prerequisites: 242, 280. Two semesters, 3 credits each.

## 491 A,B Senior Seminar

Develops the student's ability to learn mathematics independently and to write for a mathematical audience. Includes a significant expository or research paper and a public presentation. Must be taken in the fall semester and January term of the senior year. Permission required. Fall, 1 credit; January, 3 credits.

## 190, 290, 390, 490* Selected Topics in Mathematics

Subject of current importance in mathematics. May be repeated for credit. Variable time and credit.

## 295, 395, 495 Independent Studies

 Credit and time arranged. Permission required. May be repeated for credit. Variable credit.
## COMPUTER SCIENCE COURSE DESCRIPTIONS (COSC)

## 120 Computer Science I

Introduction to computer programming in a high-level language such as $\mathrm{C}, \mathrm{C}++$ or Java, emphasizing structured programming techniques, procedural methods and simple user-defined data structures. One semester, 3 credits.

## 220* Computer Science II

Computer programming emphasizing data structures, algorithms, pointers and low-level interface. Prerequisite: 120. One semester, 3 credits.

## 190, 290, 390, 490 Selected Topics in Computer Science <br> Variable credits. Permission required. May be repeated for credit.

## 295, 395, 495 Independent Studies

Credit and time arranged. Permission required. May be repeated for credit.

[^3]
## MATHEMATICS-BUSINESS

Jeff Lutgen (Mathematics)
Charles R. Laine (Business Administration)

ad
inhe interdisciplinary program involving mathematics and business administration provides a strong background of concepts and techniques in the field of "quantitative management." It prepares the student for a variety of positions in banking, insurance, manufacturing, transportation, and other industries. Such positions are frequently in staff areas involving the application of quantitative methods to decision-making situations-for example, sales forecasting, demographic analysis, personnel planning, financial control, and operational analysis. This program also prepares the student for pursuing postgraduate work in the field of applied mathematics and operations research.

## GUIDELINES FOR A MAJOR IN MATHEMATICS-BUSINESS

Students should begin the calculus sequence as early as possible in their college career and should consult with one of the faculty advisors listed above in selecting courses from the elective and recommended categories.
I. Mathematics:

Calculus and Analytic Geometry, MATH 141A or 139AB, 141B, and 241, 12-15 credits
Elementary Applied Linear Algebra and Differential Equations, MATH 242, 3 credits
Abstract Thinking, MATH 280, 3 credits
Probability and Statistics, MATH 315, 3 credits
Numerical Analysis, MATH 350, 3 credits
Mathematical Modeling, MATH 354, 3 credits
II. One of the Following:

Computer Science I, COSC 120, 3 credits
Computer Science II, COSC 220, 3 credits
III. Business Administration and Economics:

Principles of Economics: Macroeconomics, ECON 200, 3 credits
Principles of Accounting I, II, BSAD 201, 202, 6 credits
Business Finance I, BSAD 310, 3 credits
Marketing Principles, BSAD 320, 3 credits
Management and Organizational Behavior, BSAD 330, 3 credits
Management Information Systems, BSAD 341, 3 credits
Operations Management, BSAD 342, 3 credits
IV. Capstone Requirement:

Senior Seminar, MATH 491A,B, 4 credits or
Management Strategy and Policy, BSAD 489, 3 credits.
Electives-Optional but highly recommended. Students should confer with their faculty advisors to select appropriate elective courses.

Principles of Economics: Microeconomics, ECON 201, 3 credits
Introduction to Econometrics, ECON 305, 3 credits
Managerial Economics, ECON 365, 3 credits
Business Finance II, BSAD 411, 3 credits
Management Strategy and Policy, BSAD 489, 3 credits

H. Rafael Chabrán<br>Marie-Madeleine Chirol

George A. Da Roza<br>Gustavo Geirola<br>Horng-Yi Lee<br>Doreen M. O'Connor-Gómez

Andrew Wallis, Chair

Ranguage study is desirable for liberally educated people because such study provides insights into other peoples and cultures. It also heightens awareness of language and generally strengthens knowledge of English. A concentration in Modern Languages and Literatures provides its graduates with both a specific area of skills and competence and a sense of the relationship between a particular discipline and the large body of knowledge that is the patrimony of liberally educated persons.
Whittier College's programs in Modern Languages and Literatures stress both practical and humanistic goals. A series of graduated language courses permits acquisition of oral, aural, and written mastery of a foreign language. A comprehensive program of courses in literature and civilization ranges from general introductory surveys through period and genre offerings, to seminars treating individual major authors. This program provides, in depth and in breadth, the experience of another culture and of its modes of thought and expression. The study of Chinese, French, Japanese, or Spanish contributes to this crucial goal by nurturing the development of a sensitive use of the verbal medium.
As educators, we believe that learning languages is essential preparation for participation in the global economy. The USA cannot be a leader in the world while our citizens are captive of their inability to communicate beyond our borders. Knowledge of other languages is essential for business and trade and, more importantly, can be an important bridge to the understanding of other countries, cultures and customs. All college students must be knowledgeable about the broader world and conversant in another language.
Modern communications technology has turned the global village from a dream to a reality. The Department's Language Resource Center and media ready classrooms bring technology to the student, making the study of languages, literatures and cultures more interactive and effective. Instructors utilize the Internet as a tool to bring authentic, meaningful culture to their students and learning is enhanced through exercises to develop higher levels of skill in speaking, listening, reading and writing. Students and teachers have easy access to CD-ROM's, DVD's and can watch videos from around the world using the international VCR. Scanning with character recognition of multiple European and Asian languages is also available.

Students should take a placement exam in September of their freshman year and also consult a faculty member in the language to determine enrollment level. The department also serves as a resource for preparation for professional careers in government, commerce, law, journalism, science, social work, women's studies, bilingual education, and teaching, among others.
Committed to interdisciplinary studies, the Department also offers several paired courses in the College's Liberal Education Program. When paired, these courses are taught in English and are generally numbered at the 100/200 level.

## GUIDELINES FOR A MAJOR IN CHINESE

Mandarin Chinese is the native tongue of approximately 1.4 billion people and is widely used throughout Southeast Asia as the language of cultural, educational and commercial exchange. The Chinese major is designed to provide students with linguistic and cultural competency to function successfully within a Chinesespeaking society. With a structured sequence of language, culture and literature courses, the curriculum is designed to familiarize students with China's long history of cultural traditions and to prepare students for study, travel, business and if so desired working and living in a Chinese environment. Students who wish to major in Chinese must have Intermediate II level Chinese and a minimum of 30 credits, 24 of which must be at the 300 level or above. Students who major in Chinese must present a senior project. Students are also encouraged to do a January term in China or a study abroad program in one of the many universities available to them in China, Hong Kong or Taiwan. Students who major in Chinese may major in either Chinese Language or Chinese Studies.

## GUIDELINES FOR A MAJOR IN FRENCH

The Major in French is a comprehensive program leading to proficiency in the language skills stressing knowledge of the literary, cultural and historical developments of France and the Francophone world. Learning French creates career opportunities. French is the official language of 33 countries and is widely spoken in at least 10 more. One of only two languages spoken on all five continents, it is used by about 500 million people around the world and has over 125 million native speakers. It is the 2nd language of the Internet, and the 2nd most influential language in the world (Language Today). It is one of the two official working languages of the United Nations, NATO, the Olympic Games, the International Red Cross, the International Monetary Fund, and the 31-member Council of Europe. In addition, 1,000 French Companies operate in the U.S. employing 650,000 Americans, while a similar number of U.S. companies have operations in France. A major in French requires a minimum of 30 credits, 24 of which must be at the 300 level or above. Required courses: FREN 355, 356 (or equivalent). Students are encouraged to take at least one course in each of the three major genres (prose, poetry, drama). We offer study abroad semesters and a January term program in France. Students must complete a paper-in-the-major, consisting of a 10 to 15 page paper in a seminar and in close consultation with their professor, during the last three semesters of their major. Also highly recommended is the study of another language.

## GUIDELINES FOR A MAJOR IN SPANISH

A major in Spanish requires a minimum of 30 credits, 24 of which must be at the 300 level or above. Since mastery of the Spanish language includes the cultural contexts that produced it and which it continues to influence, students are encouraged to take courses in other disciplines related to the Hispanic culture. An international experience of academic and cultural studies is highly recommended. A variety of programs in Spain and Latin America provides students with the unique opportunity to become immersed in language, culture, and academics and courses taken abroad may satisfy major requirements only if approved in advance by the language faculty. Required courses for the major include: $320,325,355$, and 356 (or equivalent). Students are encouraged to take at least one course in each of the three major genres (Prose, Poetry, Drama) as well as courses from both the Peninsula and Latin America, both historical and contemporary. The paper-in-the-major requirement is met in courses at the 400 level, which characteristically require significant formal writing assignments as well as a capstone project that demonstrates the student's command of the material and methods, as well as his/ her ability to communicate these skillfully in writing. Also highly recommended is the study of another language.

## THE JAPANESE PROGRAM

The program in Japanese offers training in spoken and written language, as well as study of Japanese culture through a wide range of topics, including literature, linguistics, history, philosophy, art, modern culture and communication. Language classes are conducted in Japanese as much as possible, and provide students personal interaction and communicative practice, including language lab, and opportunities to experience linguistic as well as cultural hands-on experience with native Japanese speakers through various activities and projects. Other classes are conducted in English. The primary goal of the Japanese program is to develop both Japanese language skills and cultural awareness sufficient to succeed in the Japanese speaking society, as well as to provide an opportunity to widen insight into one's own native language and culture. Knowledge of Japanese is a valuable asset to those who seek opportunities in business, teaching (JET: the Japan and Exchange Teaching Programme in Japan), and government. The College offers a study abroad program at Obilin University in Tokyo, Japan. The courses taken abroad may satisfy minor requirement

## GUIDELINES FOR A MINOR IN CHINESE, FRENCH, JAPANESE OR SPANISH

A minor in Chinese, French, Japanese or Spanish requires a minimum of 16 credits from any level. Interested students should consult with language faculty.
All courses require a Language Lab/Supporting Materials Fee

## COURSE DESCRIPTIONS

## Chinese Language Courses (CHIN)

## 120 Elementary Chinese I

An introductory course in standard Chinese (Mandarin) designed for students with no previous knowledge of the language. The course introduces the fundamentals of Chinese, including pronunciation, grammar, and Chinese characters, emphasizing the four basic language skills: listening, speaking, reading and writing. By the end of the 120/121 sequence, students will have acquired knowledge of basic grammar rules, the ability to converse, read and write on simple topics of student's daily life, and command over 500 Chinese compounds and over 300 characters. Four hours of classroom instruction and one hour of lab per week. One semester, 4 credits.

## 121 Elementary Chinese II

A continuation of Chinese 120 with accelerated introduction of expressions, grammar, and sentence patterns designed to facilitate speaking, reading, and writing. Four hours of classroom instruction and one hour of lab per week. One semester, 4 credits.

## 160 Chinese for Business and Travel

This course is designed for students with no or little knowledge of Chinese. This course introduces practical conversational Chinese (Mandarin) for business and travel. It focuses on enhancing the listening and speaking skills in situations related to hotels, airports, business and economic policies, appointments, etc. It also covers culture, social etiquette, and doing business in Chinese-speaking areas, such as China, Taiwan and Hong-Kong. One semester, 3 credits.

## 220 Intermediate Chinese I

A course designed to fulfill the personal interests and future professional goals of students who have had one year of elementary modern Chinese. Students will learn new vocabulary, sentence patterns, idiomatic expressions, proverbs, as well as insights into Chinese society, culture and customs in this course. Three hours of class, one hour of lab. One semester, 3 credits.

## 221 Intermediate Chinese II

A continuation of Chinese 220. By the end of this sequence, students are expected to be able to engage in general conversation with
native speakers and to read and write essays in Chinese characters. Three hours of class, one hour of lab. One semester, 3 credits.

## Composition, Culture and Literature Courses

## 320* Composition and Conversation

This course aims at further development of overall language proficiency through extensive reading of selected texts representing a wide variety of styles and genres, including materials from newspapers, magazines, and other documents. Classes are conducted primarily in Chinese. Prerequisite: 221, or equivalent. One semester, 3 credits.

## 50* Topics in Literature

A capstone literature course for students who have attained a high level of Chinese language proficiency. Students read a wide selection of representative works of major modern writers of China, Taiwan, and other Chinese communities. Topics vary by semester. May be repeated for credit. Prerequisite: 320 , or equivalent. One semester, 3 credits.

## 390* Current Topics

This course includes essays introducing the social and cultural conditions of China, Taiwan, and other Chinese-speaking communities; live news broadcasts on current issues; and selected business Chinese expressions. This course bridges the gap between purely academic learning and the real world of native speakers. Emphasis is on reading, speaking, listening and writing in Chinese. Topics vary by semester. May be repeated for credit. Prerequisite: 320 , or equivalent. One semester, 3 credits.

190, 290, 390*, 490 Selected Topics in Chinese
Variable credits. Permission. May be repeated for credit.

295, 395, 495 Independent Studies

## Courses Taught in English

## 100 A Taste of China

This course is designed for students to get a taste of Chinese calligraphy, cooking, movie, theater, martial arts, meditation, and other folk arts. Artists, chefs, martial art and meditation
masters from the Los Angeles area are invited to join student activities. Students will exhibit their calligraphy, or other related works at the end of the semester. One semester, 1 credit.

## 110, 310* Masterpieces from China

Representative readings in translation of twentieth-century Chinese literature from the late-Qing dynasty to the People's Republic of China, and contemporary Taiwan are discussed. This course offers a window in twentieth-century China and an introduction to the study of literature to ask why read literature, and to learn about different literary approaches and movements. Students are expected to examine the socio-political context and questions of political engagement, social justice, class, gender, race, and human rights. All readings are in English translation and no background in China or Chinese is required. One semester, 3 credits.

## 130, 330* Chinese Theater

This is an introductory course to the practice, concepts, history, and dramatic literature from China. The course focuses on the development of the Chinese theater as it received influences from other ethnic theaters, including the Japanese, French, Spanish, and American. Hands-on experiences with the Chinese theater and interaction with theater artists in the Los Angeles area will be emphasized. No background in China or Chinese is required. One semester, 3 credits.

## 150, 350* Chinese Cinema

An introductory course to the culture, aesthetics, and socio-political background of Chinese film produced in the period from the 1930's till the present. A goal of the course is to develop and refine an ability to think about and understand culture through cinematic expression. Students will look at the cultural antecedents that influence Chinese filmmakers and the ways they manipulate traditional artistic forms as a means of self-expression, narrative and the function of films both within the art form and by extension within Chinese culture-expression. A wide variety of Chinese films are viewed. No background in China or Chinese is required. One semester, 3 credits.

## 151 Pearls of the Orient

This course exposes students to themes and motifs in modern Chinese literature that have found expression in popular Chinese culture
and film. Students experience a worldview and value system different from their own as they reflect on issues of class, gender, ethnicity and human rights. No background in China or Chinese is required. One semester, 3 credits.

## 251 East Asian Literatures

This is a survey course designed to expose students to the literatures of China, Japan and Korea, and to examine their cultural relationships as well as their independent literary development. Students will read literary selections from each region from the early literary period to the nineteenth century. These readings enable students to better understand how literature reflects the mores and morals of different peoples and times. One semester, 3 credits (same as Japanese 251)

## 275 Cinematic Landscapes

This course introduces first and second year students to the use and function of landscapes in Asian literature and visual arts that are translated and transposed unto film. The course explores the concept and function of the landscape as a narrative with a rich connection to the Asian cultural heritage of calligraphy and painting. One semester, 3 credits. (same as Japanese 275)

## 325 Culture and Civilization

This is a course of Chinese cultural history from the Neolithic period to the present that examines both the evolutions and continuities of China's ancient culture. Students explore the cultural implications of geomancy, Buddhist and Daoist practices in every day rituals, qi, acupuncture, martial arts, herbal medicines and more presented through reading assignments, videos, and films. No background in China or Chinese is required One semester, 3 credits.

## French Language Courses (FREN)

## 76* Performance in French Workshop

Learn about French theatrical tradition while helping write and perform a production in French. Prerequisite 120. One semester, 1 credit. May be repeated for credit.

## 120 Elementary French I

This course is designed for students who have never studied French, or who have placed into French 120 on the French Placement Test. It is taught in French with four hours
of classroom instruction and one hour of lab per week. Immersion of students is facilitated through the use of authentic material as well as the usage of video and other technological tools (multimedia, Web). By the end of this course students should have developed basic oral and written communication skills as well as reading skills, and be acquainted with some aspects of Francophone culture. One semester, 4 credits.

## 121 Elementary French II

This course is a sequel of Elementary French I. It is taught in French with four hours of classroom instruction and one hour of lab per week. Immersion of students is facilitated through the use of authentic material as well as the usage of video and other technological tools (multimedia, Web). By the end of this course students should have further developed their communicative competence and reading skills, as well as be better acquainted with the Francophone world. Prerequisite: 120, or equivalent. One semester, 4 credits.

## 220 Intermediate French I

This course is a sequel of Elementary French II. It is taught in French with three hours of classroom instruction a week. It includes a brief review of the material studied in Elementary French I and II, presents more elaborate structures of the French language and culture, and introduces students to literary and contemporary readings. Three hours of class, one hour of lab. Prerequisite: 121, or equivalent. One semester, 3 credits.

## 221 Intermediate French II

Course is designed to strengthen students' competence to communicate in the French language. It is taught in French with three hours of classroom instruction. It includes a thorough review of grammar and strongly emphasizes oral and written communication. Three hours of class, one hour of lab. Prerequisite: 220, or equivalent. One semester, 3 credits.

## 225 Conversation, Culture and Communication

This course is designed to extend students' aural comprehension and oral expression, and to further the acquisition of a more complex vocabulary associated with contemporary
issues described in newspapers, television and the Web. Prerequisite: 221 , or equivalent. One semester, 3 credits.

## Courses Taught in English

115* Introduction to Contemporary French This class is an introduction to contemporary France in which we look at the constant exchange of literary, cinematic, philosophical and even culinary ideas between France and the U.S. The goal is not to determine which culture is better, but to learn about another culture (and therefore our own as well) while acquiring the tools of cultural analysis. Taught in English. No prerequisite. One semester, 3 credits.

126* Francophone Culture and Civilization (Same as 326) Taught in English. No prerequisites. One semester, 3 credits.

## 173* French Cinema

(Same as 473) Taught in English. No prerequisites. One semester, 3 credits.

## 174 Le Flâneur I

(Same as 374) Taught in English. Students should have at least 1 semester of college French. One semester, 3 credits.

## 175 Le Flâneur II

(Same as 375) Taught in English. Students should have at least 1 semester of college French. One semester, 3 credits.

177* Franco-African Cinema and Literature (Same as 477) Taught in English. No prerequisites. One semester, 3 credits.

178* Pre and Post Revolutionary Child (Same as 478) Taught in English. No prerequisites. One semester, 3 credits.

179* Women's Portraits/Portrait de femmes
(Same as 475) Taught in English. No prerequisites. One semester, 3 credits.

180* Love and Life until the Revolution (Same as 480) Taught in English. No prerequisites. One semester, 3 credits.

## 181* Franco-Asian Literature

(Same as 481) Taught in English. No
prerequisites. One semester, 3 credits.

## Composition, Culture and, French For Business

## 310 Composition and Stylistics

Course designed to develop and refine students' writing skills on topics that are increasingly more abstract. It introduces students to the critical elements of stylistic differences and the application thereof. Prerequisite: 221 (may be concurrent enrollment). One semester, 3 credits.

## 315* French for Business

Course designed to introduce students to commercial French including correspondence, and acquisition of business related vocabulary, and an understanding of successful business interactions. Prerequisite: 221 or equivalent. One semester, 3 credits.

## 325* French Culture and Civilization

 Course designed to study the evolution of French culture and civilization by establishing the links between political, social, and intellectual developments and the associated artistic and literary achievements. Prerequisite: 221 or equivalent. One semester, 3 credits.326* Francophone Culture and Civilization Course designed to introduce students to the historical formations and transformations that occurred outside France (Africa, Caribbean, Canada and Americas). Prerequisite: 221 or equivalent. One semester, 3 credits.

## Literature Courses

355* Introduction to French Literature I Survey course of French literature from the Middle Ages through the 18th century. Major literary works of writers of prose, poetry, and theater are read and discussed from both a historical and literary perspective. This course is taught in French. Students are expected to participate actively in class discussions, to give brief oral presentations, and to write short papers. Prerequisite: 221 or equivalent. One semester, 3 credits.

356* Introduction to French Literature II Survey course of French literature from the 19th to the 20th century. This course includes major works of French and Francophone writers of prose, poetry and theater. Works are read and discussed in French from both a historical and literary perspective. Students
are expected to participate actively in class discussions, to give brief oral presentations, and to write short papers. Prerequisite: 221 or equivalent. One semester, 3 credits.

## 432* Heroes and Heroines

The 17th century in France is a period where heroines and heroes were redefined to fit a society in transition. Topics will include the transition from the Baroque to Classicism, and the evolution of dominant intellectual and political currents such as rationalism and absolutism and the redefinition of the role of masculine and feminine ideals. Prerequisite: 310 or equivalent. One semester, 3 credits.

## 435* History of Modern Novel

Course designed to provide students with a more thorough comprehension of the French and Francophone modern novel, from the 17th to the 20th-century. It is based upon detailed analysis of literary texts and considers the socio-historical background that contributed to the evolution of the genre. Prerequisite: 310 or equivalent. One semester, 3 credits.

## 453* Poetic Perspectives

Course designed to provide students with a better understanding of the 19th and 20th-century poetic movements, from Romanticism, Parnasse and Symbolism to more contemporary expressions of the poetic genre. It includes analysis of French and Francophone poetry and presents students with analytical tools that contribute to critical thinking. Prerequisite: 310 or equivalent. One semester, 3 credits.

## 465* 20th-Century Theater

Course designed for students who wish to broaden their cultural and literary understanding of 20th-century theater. Works studied are representative of major authors in the history of ideas of modern French and Francophone literature. Prerequisite: 310 or equivalent. One semester, 3 credits.

## 469* Nouveau Roman/Nouveau Théâtre

Course designed to acquaint students with the literary production during the1950's. Works studied are representative of major authors of this specific movement, such as RobbeGrillet, Duras, Sarraute, Ionesco and Genet. Prerequisite: 310 or equivalent. One semester, 3 credits.

## Other Perspectives

## 374* Le Flâneur I

This is the pre-departure course for the January class in Paris (Le Flâneur II). A "flâneur" is defined as "an aimless idler; a loafer...from flâner, to idle about, stroll." By walking about and observing Los Angeles, and by thinking about cities critically through diverse readings, students will be initiated to fields of knowledge ranging from urban studies to literature. Students will use what they learn in this class and in the field to construct a project to be completed in Paris during January. While the course is taught in English because of the co-enrollment of students at different language levels and from other departments, students at the 374 level will read and complete assignments in French. One semester. 3 credits.

## 375* Le Flâneur II

This is the companion course to 374 and builds on the theoretical knowledge and experiences of Le Flânuer I. Le Flânuer II takes place in Paris and uses the city to build comparative knowledge of the historical, cultural, environmental, geographical and other forces that inform the modern city. The Paris experience is intended not only to give fuller knowledge of an alternate urban environment, but should serve as a comparative tool for better understanding of Los Angeles. In order to get Liberal Education Connections 2/Comparative Knowledge credit, students must successfully complete both Le Flanuer I and II. Like 374, French 375 is for French majors or those with strong French language skills. January term. 3 credits.

## 473* French Cinema

This course presents the main movements and directors in French cinema. Students will be introduced to cinematographic vocabulary and they will be able to develop critical thinking through the analysis of films. Prerequisite: 310 or equivalent. One semester, 3 credits.

## 476* Performance in French

This course explores various aspects of performance in the French tradition-both as spectators studying varying types of French and Francophone theater texts and productions, and as actors in a workshop setting. Both theoretical and experiential, a major emphasis is put on creativity and collaboration to achieve the goals of the
course. After working closely together to write and produce a creative work, the class's performance will be the final "exam." Prerequisite: 310 or equivalent. One semester, 3 credits.

## 477* Franco-African Cinema and Literature

Course designed to introduce students to contemporary African literature and cinema. It is based upon detailed analysis of literary texts and of films, both addressing a variety of cultural aspects of African Francophone life. Prerequisite: 310 or equivalent. One semester, 3 credits.

## 478* Pre and Post Revolutionary Child

This class examines developments leading to modern concepts of the child in France all the while tracing parallel ideas of identity such as selfhood, nationality, public education, welfare and gender using literature and film. Prerequisite: 310 or equivalent. One semester, 3 credits.

479* Women's Portraits/Portraits de femmes Course designed to expose students to various portrayals of women, by women and by their male counterparts. Works studied are representative of different genres and centuries in French and Francophone literature. Prerequisite: 310 or equivalent. One semester, 3 credits.

## 480* Love and Life until the Revolution

Students study works from the middle-ages to the Revolution and discuss the transformation of "senses and sensibilities" over time. To better understand the works of fiction, we will discuss the history and the society of the period. Prerequisite: 310 or equivalent. One semester, 3 credits.

## 481* Franco-Asian Literature

This course explores the Asian influence in Francophone literatures and cultures. It exposes students to non-traditional aspects of the Francophone culture deriving from a history of complex and diverse interactions between Asia and French-speaking societies. Students will gain insight about the subject through the study of literature and films. Prerequisite: 310 or equivalent. One semester, 3 credits.

## 490* Special Topics

An in-depth study of a specific period, genre, or topic (such as Francophone Writers, French Renaissance, 17th-century Moralists, Classical

Theater, Enlightenment, etc.). Topics vary by semester. Prerequisite: 310 or equivalent. One semester, 3 credits.

## 499* Senior Thesis

A paper and oral defense in the major that will indicate the student's acquisition of the literary, the cultural and the language skills needed to pursue studies in French or Francophone literature.

190, 290, 390* Selected Topics in French Variable credits. Permission. May be repeated for credit.

295, 395, 495 Independent Studies
Credit and time arranged. Permission. May be repeated for credit.

## Japanese Language Courses (JAPN)

## 10 Japanese for Business

Designed for students who anticipate using the language in business-related fields. Also introduces Japanese business manners and customs. No prerequisites. One semester, 2 credits.

## 120 Elementary Japanese I

An introductory course in simple conversation, basic grammar, reading, culture, and written Japanese (Hiragana, Katakana and simple Kanji). Four hours of class, one hour of lab. One semester, 4 credits.

## 121 Elementary Japanese II

Continuation of 120 . Basic grammar, conversation, composition and readings. Four hours of class, one hour of lab. Prerequisite: 120 or equivalent on placement exam. One semester, 4 credits.

## 190, 290, 390, 490* Selected Topics in Japanese

An in-depth study of a specified topic, such as more complex syntax structures, various cultural aspects, including cinema, literature, art, religion, and the role of Zen philosophy in manners and ethics. Variable credits. Permission. May be repeated for credit.

## 295, 395, 495 Independent Studies

Credit and time arranged. Permission. May be repeated for credit.

## Spanish Language Courses (SPAN)

## 10 Latin American Performance Experience

An experiential class in which students explore their bodies and minds in order to explore the difficulties involved in staging a text (poem, play, short story). While students practice Spanish during rehearsals, they also explore Latin American perspectives and techniques production (from acting to performance). Prerequisite: 221 or higher, equivalent, or permission. One semester, 3 credits.

## 120 Elementary Spanish I

Students are introduced to the basic principles necessary to carry out written and oral communication. Emphasis will be placed on developing the ability to use the language creatively to talk about oneself and to deal with daily situations within the Hispanic cultural context. Four hours of class, one hour of lab. Presupposes no previous study of Spanish. Not open to students who have completed more than two years of high school Spanish nor to Native Speakers. One semester, 4 credits.

## 121 Elementary Spanish II

Continuation of 120 . Basic grammar, conversation, composition and readings. Four hours of class, one hour of lab. Prerequisite: 120 or equivalent on placement exam. Not open to students who have completed more than three years of high school Spanish, nor Native Speakers. One semester, 4 credits.

## 122 Intensive Spanish

A course designed for students who have studied Spanish before but who want a comprehensive review course. As a fastmoving, intensive course focus is on learning strategies for reading, writing, and communicating in Spanish. Prerequisite: Previous knowledge of Spanish. One semester, 3 credits.

## 220 Intermediate Spanish I

A continuation of 120,121 , this class further develops the students' ability to communicate in Spanish, both orally and in writing. Students will speak, read, and write about such topics as advice, opinions, and hypothetical situations, while at the same time gaining insights into the culture of the Hispanic world. While grammar is reviewed, this course does require a good foundation in the basic principles. Three hours of class, one hour of lab. Prerequisite: 121 or equivalent. Not open to Native Speakers. One semester, 3 credits.

## 221 Intermediate Spanish II

Continuation of 220 . Review of grammar and extensive practice in conversation, writing and reading of selected texts as well as viewing of videos on Hispanic life and culture. Three hours of class, one hour of lab. Prerequisite: 220 or equivalent. Not open to Native Speakers. One semester, 3 credits.

## 222 Spanish for Bilingual Students

A fast paced course for students whose native language is Spanish or for those with extensive exposure to the language. Prerequisite: Placement exam results or permission. One semester, 3 credits.

## 230 Spanish Conversation

This course is conducted in Spanish and engages students in conversation in a variety of formats toward further developing oral proficiency and vocabulary. Readings, Internet surfing, TV or other viewings on topics of current interest done outside of class serve as the basis for general class discussions through practice in different types of discourse, including narration, description, critical commentary, debate, and dramatic dialogue. Some of the time will be devoted to developing conversational strategies, and much importance will be given to interaction in the classroom. Small group work, emphasis on natural language, and the use of authentic materials (including readings and films) will be among the instructional techniques used. Prerequisite: 221 or higher, equivalent, or permission. One semester, 3 credits.

## Culture, Composition, and

 Introduction to Literature
## 225* Chicano Literature and Cultural Production

Surveys the works of Mexican-American authors of poetry, prose, and drama, which delves into questions of gender, textual interpretation, and socio-historic contexts. One semester, 3 credits.

## 310 Intensive Spanish Grammar and Composition

This course focuses on a theoretical and practical approach to Spanish grammar. The goal is to provide the students with the right skills for discerning the structure and formal beauty of the Spanish language and its rules and differences with English. This course also explores
phonology, morphology, syntax and semantics. Prerequisite: 221 or higher, equivalent, or permission. One semester, 3 credits.

## 320 Advanced Composition and Creative Writing

This course emphasizes the development of writing skills, vocabulary expansion, and review of grammatical structures. Focus is on written expression, creative and academic, on themes related to the Spanish cultures. Students develop the strategies and skills needed to write on topics through practice of different types of discourse, including, narration, poetry, critical commentary and theoretical essays. Prerequisite: 270, equivalent, or permission. One semester, 3 credits.

## 325 Conversation on Hispanic Cultures

A study of Hispanic culture from its origins to the present. A study of the diversity of Hispanic civilization, this course will examine Hispanic societies through significant areas of cultural expression, including literature, visual arts, music, and film. Conducted entirely in Spanish. Prerequisite: 270, equivalent, or permission. One semester, 3 credits.

## 355 Introduction to Peninsular/Latin American Literature I

A survey of the most representative texts of writers of prose, poetry, and theater within the contexts of literary and sociohistorical interpretations. This course surveys the major authors and includes close readings of representative selections from 1100 to 1700 , with attention to the development of literary genres in the context of the changing cultures of Spain and Latin America. Conducted entirely in Spanish with class discussions and extensive practice writing commentaries on texts. Designed for Spanish majors and minors. May be taken out of sequence. Prerequisite: 320, equivalent, or permission. One semester, 3 credits.

## 356 Introduction to Latin American/ Peninsular Literature II

This course studies trends and developments in major literary works from 1700 to the present day in both the Peninsula and Latin America. Conducted entirely in Spanish with class discussions and extensive practice writing commentaries on texts. Designed for Spanish majors and minors. May be taken out of sequence. Prerequisite: 320 , equivalent, or permission. One semester, 3 credits.

## Literature Courses

## 410* Masterpieces from the Middle Ages to the Baroque

Representative literary works of the Medieval, Renaissance and Baroque in both Spain and Latin America. Poetic and narrative texts, in their entirety, are read for their literary, cultural and historical value. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

## 420* New World and Spanish Colonial Literatures

Selections from major genres of the precolonial and colonial periods (1100-1810) produced by authors in Spain and Latin America: indigenous codices, the chronicle of the Encounter and Conquest, lyric and epic poetry, colonial theater, pre-independence writing, etc... Among the themes examined are: utopian images of the New World, the Hispanic "rewriting" of indigenous cultures, and the emergence of the mestizo identity in literature and political essays. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

## 430* Spanish Peninsular Theater

This course introduces the students to the historical, sociological and dramatic developments of Spanish Peninsular Theater from the Middle Ages to most recent productions, focusing specifically on how genre and sub-genres are linked directly to social changes and political transformations in each period. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

## 440* Latin American Theater

This course traces the development of Latin American theater from the pre colonial period to the New Popular Theater. It will focus on several problematic subjects, such as geographic parameters, themes and major trends in dramatic theory, and economic and political structures in the process of production. Detailed consideration is given to contact between languages, Native American, European and African traditions, as well as influences of experimental theater and popular culture. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

## 450* Latin American Literature from Independence to Modernism

This course focuses on major authors in the period, emphasizing those genres developed in the postcolonial cultural context. Literary and sociopolitical trends and cultural images and characters from early 19th century to early 20th century are critically examined. The course also includes the impact of Latin American writing on the literature in Spain, especially on Peninsular Modernism. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

## 460* Spanish Voices: The Twentieth Century

From the turn of the century to our present time, Spanish literature has enjoyed an artistic explosion, the likes of which has not been seen since the Golden Age. A profusion of literary movements-including the Generation of '98, modernism and avant-garde—reflected the creative vibrancy of the nation even as it slipped into political and social chaos. Major works of prose, poetry and theater are analyzed for their literary innovativeness and relationship to ideological trends and social reality in contemporary Spanish letters. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

## 470* Latin American Voices: The Twentieth Century

Critical study of selected contemporary Spanish-American texts in light of current modes of writing and interpretation. This course will delineate the major patterns of formal and thematic development within the history of Latin American letters as well as emphasize the analysis of structural and linguistic problems posed by the texts. This course will also explore such tendencies as realism, surrealism and "magic realism," as well as works of social conscience, revolution and the national situation. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

## 480* Major Hispanic Authors

Intensive study of the works of the most distinguished authors in the Spanish language. Authors will vary according to instructor's expertise. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

## Other Perspectives on Literature

481* Revisiting the Canon in Peninsular and Latin American Literature
This course is designed to give students the tools necessary to read the major canonical works of Spanish and Latin American literature in order to rebuild the process through which they represent nationality, class, sexual dissidence, and ethnic issues. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

## 482* Literary Criticism and the Essay Tradition

Major approaches to the history of Spanish literary "ensayos" in Spain and Latin America. This course explores the imagery of Nation and Identities, the cultural and political debates in sciences and cultures. The course also focus on the construction of literary criticism in Spanish and translations of main trends on contemporary criticism. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

483* Cinema in Spain and/or Latin America This course examines Peninsular and Latin American cinematic production and introduces new critical approaches in film studies. The course may organize materials from a historical perspective, or focus on a selected period, theme, or director. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

484* Women's Voices in the Hispanic World This course explores Peninsular, Latin American, and Latino women voices, whether writers, political activists or in popular culture. Depending on Professor's expertise, the course will be developed as a survey by examining literary or non-literary texts from historical periods, or organized as a seminar focusing on selected texts produced by a particular group of authors or in specific nations or communities. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

## 485* Subaltern Voices, Diversity and Marginalization

This course explores literature and cultural production in Spain, Latin America and Hispanic American works from diverse theoretical approaches: feminism, cultural theory, subaltern status, and gay and lesbian studies. Students will examine how texts redefine literary forms when writing confronts the process of empowerment of minorities through racial, ethnic, and textual terms. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

## 499 Senior Presentation

Capstone presentation required of all majors upon completion of a 400 level seminar course. May Be taken as 0-1 credit. Offered Spring only, every year.

## 190, 290, 390, 490* Selected Topics

Close readings and seminar discussions aim to explore the reception of both classic and contemporary themes of literary expression. Examples: The Novel of the Mexican Revolution; Hispanic Popular Culture; AfroLatino Voices; Asian Influences in Latin America. Topics vary by semester. May be repeated for credit. One semester, 3 credits.

## 295, 395, 495 Independent Studies.

Credit and time arranged. Permission. May be repeated for credit.

[^4]Stephen Cook<br>Teresa LeVelle, Chair<br>Danilo Lozano<br>David J. Muller

## ARTISTS-IN-RESIDENCE:

David Black (Bass)
Stephen Cook (Piano)
Theresa Dimond (Percussion)
Leslie Ho (Violin and Viola)
Melanie Jackson (Voice)
Teresa LeVelle (Composition)
Yumi Livesay (Piano)
Danilo Lozano (Flute)

Melissa McIntosh Landis (Voice)<br>David Muller (Bassoon)<br>Diane Muller (Horn)<br>Joseph Stone (Oboe and Saxophone)<br>Edmond Velasco (Jazz Saxophone)<br>Wendy Velasco (Cello)<br>Bob Wirtz (Bass and Bass Guitar)<br>Scott Wolf (Guitar)

A$1 l$ students will find in music a varied and enriching program in performance and study. Exceptional opportunities for both solo and ensemble performance are available, and all students are eligible to audition for membership in the College Choir and Chamber Music ensembles. Through audition, Whittier students may also participate for credit in the Rio Hondo Symphony and the Chorale Bel Canto, strong community ensembles under professional leadership. Individual instruction in voice, instruments and composition is offered at all levels of proficiency by an outstanding artist faculty. Class instruction is also available in piano.
The Whittier College Music Department offers preparation for a wide range of career opportunities, and students with serious aspirations in music are encouraged to consider a major. In addition to applied music, class instruction is offered in conducting, music literature and materials, theory, music business and music technology. A digital piano and music technology lab is available for student use and is integrated in several course offerings. Students may also develop areas of specialization or individual projects under faculty supervision in related fields such as church music, management, musicology, ethnomusicology, music theory, music industries, and music theater.

CORE COURSES (33 CREDITS):
Introduction to Music Theory and Musicianship, MUS 70, 3 credits
Harmony I, II, III, MUS 100H, 200H, 201H, 9 credits
Musicianship, I, II, III, MUS 100M, 200M, 201M, 3 credits
Instrumentation, MUS 300, 2 credits
Class Piano for Majors, MUS 110 (must be taken concurrently with MUS 100H, and 100 M . A student may be exempt from Class Piano for Majors through testing.), 1 credit
Introduction to Music Technology, MUS 111, 2 credits
Music History I, II, MUS 203 and MUS 204, 6 credits
Introduction to Ethnomusicology, MUS 303, 2 credits
Conducting, MUS 305, 3 credits
Private Instruction, MUS 198, (minimum four semesters), 0 credits
Ensembles (chamber or choral; minimum five semesters), 0 credits
Capstone Experience, MUS 400, 2 credits
Additional Elective Requirements (At Least 9 Credits):
Music Business, MUS 104, 2 credits
World Percussion Methods, MUS 105, 2 credits
History of Film Music, MUS 206, January 4 credits; Fall/Spring 3 credits
Music Technology II, MUS 211, 2 credits
Recording Techniques, MUS 310, 2 credits
Current Topics in Music, MUS 390/490, variable credits

Proficiencies. All music majors must pass a piano proficiency examination before graduation. Music majors are expected to demonstrate basic keyboard skills by the end of the first academic year in the department. Students expecting to major in music will be examined for keyboard skills upon entry into the music major. If the audition is not passed, the student is expected to enroll in Class Piano for Majors (MUS 110) or in private piano instruction until the proficiency examination is completed.

## Proficiency Requirements:

Play all major and minor scales and arpeggios, two octaves, hands together.
Prepare a memorized composition of the intermediate level using the damper pedal.
Accompany an instrumentalist or vocalist; appropriate assignments based on level and technique will be distributed in class.
Prepare a harmonization of a simple folk tune.
Read a piece of the late elementary level at sight

## GUIDELINES FOR A MINOR IN MUSIC

Minimum Requirements (18 credits):
Introduction to Music Theory and Musicianship, MUS 70, 3 credits
Harmony I, MUS 100H, 3 credits
Musicianship I, MUS 100M, 1 credits

Music History I, II, MUS 203 and 204, 6 credits<br>Introduction to Music Technology, MUS 111, 2 credits

Ensembles (Chamber or Choral), 2 credits
Private Instruction, MUS 198, 1 credit.
Music minors are expected to participate in departmental activities and to attend music department performances. A minor must be declared upon enrolling in Music History.

## COURSE DESCRIPTIONS (MUS)

## Courses Fulfilling Liberal Arts Requirements

## 18 College Choir

A large choral ensemble open by audition to all students. It sings a variety of choral literature, and performs on campus throughout the academic year. Its two principal activities are the Holiday Dinner in December and the annual concert tour in the Spring. Recent tours include the Southeastern States, Northern California, Mexico, and Hawaii. May be repeated. 0-1 credits.

## 51 Chamber Music Ensemble

Provides students with the preparation and performance of small group/chamber music. Emphasis is placed upon high degree of musicianship and fine ensemble playing. Areas of concentration include the study of musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance. Groups ranging in size from 2 to 10 members are formed for this purpose. Performances take place on regularly scheduled Music Department activities. 0-1 credits. May be repeated.
VOCE is a select group of 12 to 16 voices chosen from the College Choir. Its repertoire includes madrigals, chamber choir literature, and popular and show music. It performs in community programs, before service clubs, and in most appearances of the Choir.

## 71 Music in History

This course is designed to help the musically inexperienced gain a better understanding of the elements of music from a listener's perspective, its evolution throughout history, and its current place in a changing society. Emphasis is placed on identification of genres, as well as social and political trends affecting musical development. Class members will attend a live music performance (extra fee required). One semester, 3 credits.

## 74 Music of Latin America

Provides an historical and philosophical survey of music in Latin America, in addition to a basic analysis of generic aspects of origins, influences, style, and development within that geographical area. Discussion of regional folkstyles, of the indigenous factor and popular trends (both traditional and progressive) and of the state of music among the Latin populations of the United States. This class will provide an overall understanding of Latin American music aesthetic and culture. One semester, 3 credits.

## 75 Music of Africa

Survey of sub-Saharan traditional and contemporary music cultures of Africa. This course examines the musical and extramusical forces that shape, maintain, and perpetuate Africa's musical and cultural expression. Discussion on the general characteristics, concepts, and ethnomusicalogical approach to the organization of sound and its meanings will be emphasized. One semester, 3 credits.

## 76 A World of Music

Introduction to the musics of non-Western cultures. Course discussions will focus on the music-cultures by geographical regions and socio-cultural performance context. Basic theories and methodologies of ethnomusicology, functions of music in society, and general musical characteristics and concepts are examined. One semester, 3 credits.

## 77* Approachable Opera

After establishing a musical vocabulary, useful in describing and analyzing music from a listener's perspective, the class will embark on a survey of Western opera. The diverse operas will be studied in their entirety and viewed in their historical context. Class members will attend a live operatic performance (extra fee required). One semester, 3 credits.

## 102 History of Jazz

This course examines the development of jazz from its African and African-American folk origins through the blues, early jazz, swing era, bebop, "cool" jazz, fusion and contemporary styles of Jazz. Discussion on the works of jazz musicians, such as Louis Armstrong, Duke Ellington, Miles Davis, John Coltrane, will emphasize their significance in United States' historical and social contexts. One semester, 3 credits.

## 103 American Popular Music

This course examines the social and parallel musical development of postwar United States. American popular music will not be viewed as a trend in contemporary society, but as an expression: of commodification, of the incorporation of experience, authenticity, and subjectivity (ideology), of textual schizophrenia, of the postmodern disappearance of reality, and of new forms of cultural resistance. One semester, 3 credits.

## 206 History of Film Music

An introduction to the history of film music, from early dramatic film scores of Max Steiner and Alfred Newman to synthesized scores of Hans Zimmer, Danny Elfman, and other contemporary composers. Extensive viewing and commentary of films; brief technical explanation of film scoring techniques; may include guest lectures. One semester, January, 4 credits; Fall/Spring 3 credits.

## Courses Fulfilling Major Arts Requirements

## 100H Harmony I

The purpose of this course is to develop a deeper understanding of common-practice melody, harmony, and voice leading, and to demonstrate their analytical and compositional uses. Music majors and minors in MUS 100H must enroll concurrently in MUS 100M. Prerequisite: MUS 70 or permission. One semester, 3 credits.

## 100M Musicianship I

The purpose of this course is to develop sight singing and dictation skills necessary in the performance and teaching of tonal music. Music majors and minors must enroll concurrently in MUS 100H. Prerequisite: MUS 70 or permission. One semester, 1 credit.

## 104 Music Business

Introduction to non-performance careers within the music business; performing-right payments, music for stage and screen, marketing, etc. Techniques designed to assist in the transfer from academic to work environment will be presented in addition to discussion of current events within the music industry.

## 105 World Percussion

This course provides students with the opportunity to learn and execute the principles of world percussion. Emphasis is placed on the teaching methods for world percussion through rehearsal techniques and performing experiences. Prerequisite: MUS 70. One semester, 2 credits.

## 110 Class Piano for Majors

Introduction to the concepts of musicianship and technique at the keyboard while preparing the student for successful completion of the required piano proficiency examination administered by the music department; content includes scales, arpeggios, accompanying skills, repertory. May be repeated for zero credit until proficiency requirement is met. One semester, 1 credit.

## 111 Introduction to Music Technology

This course is designed to introduce the student to the practical applications of music software on the Macintosh platform, including Finale, Logic Express and Garage Band. Techniques and exercises are used to discover the capabilities of each program, culminating in a semester project specifically coordinated to individual student interest. Technology fee required. Prerequisite: MUS 70. One semester, 2 credits.

## 200H Harmony II

The purpose of this course is to develop a deeper understanding of common-practice melody, harmony, voice leading, and musical form, and to demonstrate their analytical and compositional uses. Music majors and minors in MUS 200H must enroll concurrently in MUS 200M. Prerequisite: MUS 100H. One semester, 3 credits.

## 200M Musicianship II

The purpose of this course is to develop sight singing and dictation skills necessary in the performance and teaching of tonal music. Music majors and minors must enroll concurrently in MUS 200H. Prerequisite: MUS 100 M or permission. One semester, 1 credit.

## 201H Harmony III

The purpose of this course is to develop a deeper understanding of common-practice melody, harmony, voice leading, and musical form, to demonstrate their analytical and compositional uses, and to introduce nontonal musical practices. Music majors and minors in MUS 201H must enroll concurrently in MUS 201M. Prerequisite: MUS 200H. One semester, 3 credits.

## 201M Musicianship III

The purpose of this course is to develop sight singing and dictation skills necessary to perform and teach tonal and nontonal music. Music majors and minors must enroll concurrently in MUS 201H. Prerequisite: MUS MUS 200M or permission. One semester, 1 credit.

## 203* Music History I

Understanding music through score study and guided listening; principal forms, structures and compositional techniques in instrumental and vocal music from Medieval through Baroque periods. Prerequisite: MUS 100H. One semester, 3 credits.

## 204* Music History II

Music and its development in Western civilization from 1750 to the present; acquaintance with formal and stylistic problems through representative works; understanding musical concepts in their historical and cultural contexts. Prerequisite: MUS 203. One semester, 3 credits.

## 211* Music Technology II

Continuation of techniques and applications obtained in Introduction to Music Technology with emphasis on integration of software programs for optimal project success. Technology fee required. Prerequisite: MUS 111. One semester, 2 credits.

## 300* Instrumentation

The purpose of this course is to understand the properties of string, woodwind, brass, and percussion instruments. To understand scoring procedures for small and large ensembles using the above instruments, and to gain a basic understanding of the computer notation software used in this scoring process. Prerequisite: MUS 201H. One semester, 2 credits.

305* Conducting
Score reading and baton technique; study and execution of basic patterns using standard orchestral and choral literature, score reading, performance, and stylistic analysis. Prerequisite: MUS 300 , MUS 201 H or by Permission. One semester, 3 credits.

## 310* Recording Techniques

Introduction to the basic principles and properties of sound: frequency, intensity, timbre, resonance, reverberation; study of multi-track recording techniques, signal processing devices, and MIDI techniques including sequencing, analog to digital transfer, and editing. Prerequisite: MUS 211. One semester, 2 credits.

## 330* Introduction to Ethnomusicology

This course introduces the student to the theory and methodology in the field of Ethnomusicology. Emphasis is placed on the systematic study of non-Western music cultures. Topics for discussion include fieldwork, musical transcription, description of musical compositions, organology, historical and geographical approaches, context and communication, and bibliographic resources. Prerequisite: MUS 204. One semester, 2 credits.

## 400 A\&B Capstone Experience

Arranged as a directed study, this course is the capstone experience for all music majors. It is also designed to satisfy the College "Paper in the Major" requirement and the Communication IV (Senior Presentation) component of the Liberal Education Program. By the end of the junior year all music majors will have submitted to the music department chair a proposed topic and the name of the primary music department faculty sponsor. This yearlong endeavor will be accomplished while the student is in residence at the College during the senior year. Upon approval, students will enroll in MUS 400 during the fall semester of their senior year. Students will be given wide latitude while selecting a topic so their topic can be carefully tailored to meet their needs and goals. All approved topics will have both a written and public presentation component. The written portion will include the integration of appropriate musical considerations (theoretical, historical, etc.) along with personal reflection. The public presentation (which will normally take place
during the spring semester of the senior year) will involve an appropriate performance component and/or oral presentation. Examples of approved topics for the recent past include: "Astor Piazolla and the New Tango," "Avian Melody - Birdsong as Transcribed and Used in Olivier Messiaen's Catalogue d'Oiseaux," and engineering/recording/producing original student compositions. Instructor permission required. Two semesters, 2 credits.

190, 290, 390, 490* Selected Topics in Music Variable credits. Permission. May be repeated for credit.

## 295, 395, 495 Independent Study

Variable credits. Permission. May be repeated for credit.

## 198 Private Instruction

Private lessons are offered by an outstanding artist faculty in all instruments, voice and composition. One half-hour lesson with a minimum of five hours practice weekly yields one credit per semester; two half-hour lessons with corresponding practice carry two credits. Lessons may be arranged without credit. Fees for lessons are listed in the fees and charges sections.

## Student Recitals

Each month Whittier College students studying privately with an Artist-in-Residence have the opportunity to perform in the Poet Musicale. Majors are strongly encouraged to participate in partial or complete recitals as part of their upper-division work. These recital opportunities exist for all students studying privately, whether or not they are music majors.

## Ensembles

In addition to the ensembles listed above, students may participate in either of two community ensembles: RIO HONDO SYMPHONY: A regional, semi $\neg$ professional community orchestra for the advanced student. Audition required.
CHORALE BEL CANTO: A community masterworks chorale of 80 voices which performs large choral works with orchestra. The chorale is open to faculty, staff and students by audition.
*Not offered every year.

David P. Hunt

Paul Kjellberg, Chair
Michelle Switzer
hilosophy is the study of thinking clearly about ideas. It does not normally lead to any one career in particular, but prepares you for anything. Philosophy deals with everyday problems: Should I go into teaching, law, or business? Should I be a Democrat, a Republican, something else, or nothing? These practical questions prompt major philosophical concerns: Who am I? What is important? What is real?
The study of philosophy brings many benefits. It stimulates self-examination ("The unexamined life," Socrates said, "is not worth living."); it provides insights into various cultures, including your own; it explores the inter-connectedness of different kinds of knowledge; it encourages clear thinking; and it offers a view of the big picture that is helpful in all aspects of life.
The department offers two programs in philosophy. The traditional major and minor introduce students to classical philosophical issues while fostering critical skills. The program in applied philosophy offers a solid grounding in philosophy together with a concentration in another discipline, allowing students to use their philosophical training to develop a deeper appreciation of the foundations, controversies, and larger significance of an area of interest outside philosophy.

## GUIDELINES FOR A MAJOR IN PHILOSOPHY

A minimum of 30 credits, of which 21 must be at the 300 level or above, including the three "core courses," Senior Thesis and Colloquium (PHIL 498), and Seminar in Philosophy (PHIL 425). The core courses, which are required for both major programs as well as the minor program, are the following History survey courses, plus one of the survey Value courses:

History<br>Classical Philosophy, PHIL 310, 3 credits<br>Modern Philosophy, PHIL 315, 3 credits<br>Value Theory, one of either:<br>Ethical Theories, PHIL 330, 3 credits,<br>Contemporary Social Philosophy, Phil 340, 3 credits, or,<br>Feminist Philosophy, Phil 385, 3 credits

## GUIDELINES FOR A MAJOR IN APPLIED PHILOSOPHY

A minimum of 42 credits, including 18 from a field of concentration outside philosophy (the particular courses to be chosen in consultation with the faculty advisor), and 24 from within philosophy, of which 18 must be at the 300 level or above, including the three core courses, Senior Thesis and Colloquium (PHIL 498), and one 3-credit course, numbered 300 or above and approved by the advisor, on the philosophy of the field from which the 18 non-philosophy credits are taken. (This requirement may be met by a directed study if no regular course is appropriate.)

A minimum of 18 credits, of which 12 must be at the 300 level or above, including the three core courses.
NOTE: Students may petition the Philosophy Department to accept one appropriate course from another discipline as an elective in the major or the minor.

## COURSE DESCRIPTIONS (PHIL)

## 50* Meet and Talk

Informal philosophical discussion in the home of one of the faculty members. One semester, 1 credit.

## 105 Introduction to Ethics

This course presents various traditional and critical approaches to moral and ethical issues and uses them to understand practical problems in daily life. Preference given to freshmen. One semester, 3 credits

## 120* Theories of Human Nature

A philosophical approach to human nature and the human position in the scheme of things. Topics include free will, personal identity, human excellence, and the difference between human beings, animals, and machines. One semester, 3 credits.

## 220* Philosophical Issues in Imaginative Literature

Develops an understanding of the philosophical enterprise through discussion of works of fiction that raise issues of a philosophical nature. One semester, 3 credits.

## 230* Philosophical Issues on Film

Addresses philosophical questions posed by some of the masterpieces of world cinema; students view feature-length films, read relevant philosophical texts, and explore connections between the films and texts. January session, 4 credits.

## 250* Philosophy of Love and Human Sexuality

An examination of the constructions of female and male sexuality and some of their ethical and political implications; contemporary issues including promiscuity, child abuse, prostitution, pornography, and marriage. One semester, 3 credits.

## 260* Environmental Ethics

The evolution of theoretical responses to unprecedented environmental crises such as Global Warming and mass extinctions-from application of traditional ethical theories to the development of comprehensive alternative environmental philosophies. One semester, 3 credits.

## 270* History of Social Thought

Historical approaches to the foundations of the state, and feminist and anti-racist critiques of that social contract tradition. One semester, 3 credits.

## 280* Simplicity

This course explores the theory and practice of simplifying one's life. Readings come from eastern and western traditions, ancient and modern, with a particular focus on the Quaker practice of simplicity as a way to live in accordance with one's conscience. There will also be a one-week retreat at Hsi Lai Temple to experience the Buddhist approach to simplicity. The course is offered in Jan term. 4 credits.

## 300 Early Chinese Philosophy

The early period of Chinese philosophy: Confucianism and Daoism, as well as other thinkers and schools of thought, all of which were influential in the development of cultures across East Asia. One semester, 3 credits.

## 302* The Development of Buddhist Philosophical Thought

The development of Buddhist philosophical thinking as it began in India and flourished in China and Japan. Previous course in philosophy recommended. There will also be a one-week retreat at Hsi Lai Temple, as the course is offered during Jan term. One semester, 4 credits.

## 310 Classical Philosophy

Greek and Roman thought as the foundation for Western philosophy with an emphasis on Plato and Aristotle. Previous course in philosophy recommended. One semester, 3 credits.

## 312* Medieval Philosophy

Examines the period from the beginning of Christian philosophy through the High Middle Ages to the breakdown of the Medieval synthesis; focuses on Augustine and Aquinas. Not open to freshmen; previous course in philosophy recommended. One semester, 3 credits.

## 315 Modern Philosophy

Major Continental and British philosophers of the 17 th and 18 th centuries, beginning with Descartes and ending with Kant. Not open to freshmen; previous course in philosophy recommended. One semester, 3 credits.

## 317* Nineteenth Century Philosophy

This course explores the thought of Hegel, Marx, Nietzsche, and Kierkegaard, all very difficult thinkers who were influential in forming the modern "continental" tradition in philosophy. One previous course in philosophy and instructor's permission. One semester, 3 credits.

## 326* Symbolic Logic

An introduction to formal structures of reasoning through analysis of the logical forms of language and thought; readings and problems in logic and logical theory. Not recommended for freshmen. One semester, 3 credits.

## 330 Ethical Theories

The traditional Western theories of ethics are put to the challenge of adequacy to the global world of the 21 st century. Readings from both historical and contemporary philosophers. Prerequisite: One previous course in philosophy recommended. One semester, 3 credits.

## 340* Contemporary Social Philosophy

 Concepts in social philosophy such as justice, welfare, the individual, community, and society; contemporary problems such as the just allocation of resources, the individual in relation to society, and the relationship between law and morality. Open to juniors, or sophomores with one previous course in philosophy. Recommended: Phil 270. One semester, 3 credits.
## 345* Philosophy of Art

Philosophical reflection on the nature of the arts: the plastic arts (painting, sculpture, etc.), literature, music, and performance; topics include the definition of art, critical appraisal, artistic creativity, aesthetic experience, and the role of audience and institutions. Open to juniors, or to sophomores with one previous course in philosophy. One semester, 3 credits.

## 350* God and Religion

The idea of God; proofs for the existence of God; the nature of religious language; the
problem of evil; arguments for and against the supernatural. Open to juniors, or sophomores with one previous course in philosophy. One semester, 3 credits.

## 360* Philosophy of Mind

Critical examination of the major theories about the nature of mind; an exploration of selected topics, including the mind-body relationship, personal identity, artificial intelligence, intentionality, and free will. Open to juniors and seniors with one previous course in philosophy and sophomores with two previous courses in philosophy. One semester, 3 credits.

## 370* Metaphysics

Theories about what sorts of things are fundamental in the universe; readings from classical and contemporary sources. Open to juniors and seniors with one previous course in philosophy, or sophomores with two previous courses in philosophy. One semester, 3 credits.

## 375* Rights of Migration

The world is increasingly global, both economically and culturally, yet politically it is still structured by nation-states. How can we recognize and respect the human rights of migrants, refugees, and asylum seekers "beyond the nation-state"? One semester, 3 credits. Recommended: Phil 270.

## 380* Truth and Knowledge

Various problems of knowledge, such as belief and opinion, the origin of ideas, the certainty of knowledge and truth, and the limits of knowledge. Open to juniors and seniors with one previous course in philosophy, or sophomores with two previous courses in philosophy. One semester, 3 credits.

## 385* Feminist Philosophy

An examination of the primary feminist responses to the omission of gender as fundamental category of analysis in social and political theory-liberal, socialist, Marxist, radical, anti-racist, and ecofeminist. Prerequisite: one previous course in philosophy or gender and women's studies. One semester, 3 credits.

## 425 Seminar in Philosophy

A focused study of some aspect of philosophy; contact instructor for details. Open to juniors and seniors with two previous courses in
philosophy. May be repeated for credit. One semester, 3 credits.

190, 290, 390, 490* Selected Topics in Philosophy
Variable credits. May be repeated for credit.

## 295, 395, 495 Independent Studies in

 PhilosophyCredit and time arranged. Permission. May be repeated for credit.

498 Senior Thesis and Colloquium This advanced seminar supports and directs senior majors in the research and writing of their Senior Thesis. The Senior Thesis, usually a year-long project of the student's choosing, is the required paper-in-the-major. Prerequisites: Senior standing and permission. Two semesters, 1 or 2 credits each, for a total of 3 credits.
*Not offered every year.

Seamus Lagan<br>Glenn Piner, Chair<br>Serkan Zorba

hysicists seek to understand nature at its most profound level. From the behavior of quarks that are the constituents of protons and neutrons, to superclusters of galaxies, physicists seek to learn the inner workings of nature. As physicists explore new parts of nature, practical applications emerge. In fact, many spectacular technologies are byproducts of physicists' investigation of nature.
At Whittier, Physics and Astronomy is a small department, attracting some of the college's best students to a friendly atmosphere, small classes, opportunities to participate in research, and close interactions between students and faculty. Courses are often taught in a non-traditional Workshop format that emphasizes learning by investigation and extensive use of the department's excellent computing facilities. Physics majors enjoy 24 hour per day access to the Physics Lounge and Physics Library where students work together on homework, or simply relax.
The Whittier College Chapter of the Society of Physics Students (SPS) is at the core of the intellectual and social life of the department. SPS sponsors several lectures per semester by physicists from other colleges, universities, national labs, and industrial labs who discuss their research. SPS also sponsors astronomy parties in the desert, trips to research facilities off-campus, a pizza and movie night, an annual picnic, and other activities.
The Whittier College Department of Physics and Astronomy offers all of its majors the opportunity to participate in research. Faculty and students engage in research together and have authored papers together. In addition, our students' research experiences have helped them gain admission to top graduate programs and secure positions of responsibility in industry. Moreover, participation in research is just plain fun.
The Physics program at Whittier is rigorous and is designed to prepare students for entry into Ph.D. programs in Physics. But the major is also flexible and offers students options which help prepare them for careers in teaching and employment in industry after graduation. Many of our Physics Majors also complete a major or minor in Mathematics.
The Department's web page, accessible through the Whittier College web page and at www.whittier.edu/Academics/PhysicsAndAstronomy, provides up-to-date information and announcements important to students interested in physics.

## GUIDELINES FOR A MAJOR IN PHYSICS

To receive a B.A. in Physics from Whittier College, students must complete 31 credits of required physics courses, 15 credits of required math courses, and either option I or option II on the following page.

## Required Physics Courses:

Intro Kinematics and Mechanics, PHYS 150, 4 credits
Intro Electricity, Magnetism and Thermodynamics, PHYS 180, 5 credits
Computational Oscillations and Waves, PHYS 250, 3 credits
Optics and Modern Physics, PHYS 275, 4 credits
Classical Mechanics, PHYS 310, 3 credits
Electromagnetic Theory, PHYS 330, 3 credits
Quantum Mechanics, PHYS 350, 3 credits
Experimental Physics, PHYS 380, 3 credits
Senior Seminar, PHYS 499A,B, 3 credits
Required Math Courses:
Calculus I and II, MATH 141 A,B, 8 credits (Note: MATH 139 A,B may
substitute for MATH 141A)
Calculus III, MATH 241, 4 credits
Elementary Applied Linear Algebra and Differential Equations, MATH 242, 3 credits

## Option I

Completion of 9 credits from the following list (at least six must be in Physics)
Electronics and Computer Interfacing, PHYS 205, 3 credits
Optics, PHYS 320, 3 credits
Statistical Physics, PHYS 315, 3 credits
Astrophysics, PHYS 360, 3 credits
Solid State Physics, PHYS 375, 3 credits
Selected Topics, PHYS 390, 490, 3 credits
Undergraduate Research, PHYS 396, 496, 1-3 credits
Complex Variables, MATH 344, 3 credits
Differential Equations I, MATH 345A, 3 credits
Numerical Analysis, MATH 350, 3 credits
Linear Algebra, MATH 380, 3 credits
Programming I, COSC 120, 3 credits

## Option II

Completion of 6 credits from the list above (at least 3 in physics) plus a twosemester introductory sequence in another science approved by the department (e.g., CHEM 110 A, B).

## GUIDELINES FOR THE MAJOR IN PHYSICS WITH AN EMPHASIS IN ASTRONOMY

To receive a B.A. in Physics with an emphasis in Astronomy from Whittier College, students must complete 44 credits of required physics courses, and 15 credits of required math courses.

## Required Physics Courses:

Astronomy of the Solar System, PHYS 100, 3 credits
Astronomy of Stars, Galaxies, and the Universe, PHYS 101, 3 credits
Intro Kinematics and Mechanics, PHYS 150, 4 credits
Intro Electricity, Magnetism and Thermodynamics, PHYS 180, 5 credits
Computational Oscillations and Waves, PHYS 250, 3 credits
Search for Extraterrestrial Life, PHYS 260, 4 credits
Optics and Modern Physics, PHYS 275, 4 credits
Classical Mechanics, PHYS 310, 3 credits
Optics, PHYS 320, 3 credits
Electromagnetic Theory, PHYS 330, 3 credits
Astrophysics, PHYS 360, 3 credits
Experimental Physics, PHYS 380, 3 credits
Senior Seminar, PHYS 499A,B, 3 credits
Required Math Courses:
Calculus I and II, MATH 141 A,B, 8 credits (Note: MATH 139 A,B may substitute for MATH 141A)
Calculus III, MATH 241, 4 credits
Elementary Applied Linear Algebra and Differential Equations, MATH 242, 3 credits

## Maximum Credits in Physics Courses

Physics majors should be aware that a maximum of 48 credits of physics courses can be counted toward the 120 units required for graduation. Physics majors are welcome to take more than 48 credits of physics courses, but doing so will necessitate completion of more than 120 credits in order to receive a B.A. from Whittier College.

## Preparation for Graduate Programs

Students planning to enter Ph.D. programs in Physics should plan to take more than the minimum number of Physics and Math courses.

## GUIDELINES FOR A MINOR IN PHYSICS

To receive a minor in Physics from Whittier College, students must complete at least 22 credits in physics and 12 credits in math.

Required Physics Courses:
Intro Kinematics and Mechanics, PHYS 150, 4 credits
Intro Electricity, Magnetism and Thermodynamics, PHYS 180, 5 credits
Computational Oscillations and Waves, PHYS 250, 3 credits
Optics and Modern Physics, PHYS 275, 4 credits
Two upper division physics courses approved by the Physics Department, 6 credits

## Required Math Courses:

Calculus I and II, MATH 141 A,B, 8 credits (Note: MATH 139 A,B
may substitute for MATH 141A)
Calculus III, MATH 241, 4 credits

## GUIDELINES FOR CHOOSING A BEGINNING-LEVEL PHYSICS OR ASTRONOMY COURSE

## Students not majoring in science:

PHYS 100, PHYS 101 and PHYS 103 are suitable for students who have a limited mathematics background. Each of these courses satisfies the COM1 requirement of the Liberal Education program.

## Pre-Health students:

PHYS 135A and PHYS 135B together constitute a year of algebra-based physics suitable for many pre-health and pre-professional students who will be taking the MCAT and related exams.
Physics majors and 3-2 Engineering Students:
PHYS 150 and PHYS 180 together constitute a year of calculus-based physics and are required of all physics majors and 3-2 engineering students.
Students with credits in AP physics, A-level physics, or other college-level physics courses should seek advice from the physics faculty, preferably before registering for physics courses at Whittier College.

## COURSE DESCRIPTIONS PHYSICS AND ASTRONOMY (PHYS)

All Physics laboratory courses require a lab fee. Lab courses include Phys 100, 101, 103, 135A, 135B, 150, 180, 205, 320, and 380. Contact the Department of Physics and Astronomy for details or see the Whittier College course schedule.

## 100 Astronomy of the Solar System

This is a general astronomy course suitable for non-science students. Topics covered include historical astronomy, orbits and gravity, light and telescopes, and the planets and other minor bodies in the Solar System. Short labs/activities will be part of the class. Some nighttime observing will be involved. This course satisfies the COM1 requirement, so quantitative skills will be developed and applied to astronomical problems. Prerequisite: Sufficient score on the Math Placement Exam or Math 74 or Math 76. One semester, 3 credits.

## 101 Astronomy of Stars, Galaxies, and the Universe

This is a general astronomy course suitable for non-science students. PHYS 100 is not a prerequisite for this course, and students may take either or both of PHYS 100 and PHYS 101, in
any order. Topics covered include the structure and physics of the sun and stars (including star formation, stellar energy sources, stellar death, and black holes), galaxies, and the universe as a whole (including the big bang theory, and the structure, history, and future of the universe). Short labs/activities will be part of the class. This course satisfies the COM1 requirement, so quantitative skills will be developed and applied to astronomical problems. Prerequisite: Sufficient score on the Math Placement Exam or Math 74 or Math 76 . One semester, 3 credits.

## 103 The Nature of Light*

This is a one-semester algebra-based course. Topics covered include both geometrical optics (reflection, refractions, lenses, mirrors, telescopes) and physical optics (interference, polarization). This course is taught in an activity-based workshop format. Prerequisite: Sufficient score on the Math Placement Exam or Math 74 or Math 76. One semester, 3 credits.

## 135A,B College Physics I,II

This is a two-semester sequence of algebrabased physics. Topics covered are kinematics, mechanics, waves, optics, electricity, magnetism and modern physics. This course is taught in an activity-based workshop format. One semester each, 4 credits.

150 Introductory Kinematics and Mechanics
This is a one-semester, calculus based introductory physics course that can serve as an entry to the major, or that can be taken to satisfy the science division breadth requirement. Topics covered include vectors, projectile motion, Newton's laws, gravitation, momentum, and energy. This course is taught in an activity-based workshop format. Prerequisite: Math 141A or Math 139A (may be concurrent). One semester, 4 credits.

## 180 Introductory Electricity, Magnetism, and Thermodynamics

This is a one-semester, calculus-based introductory physics course that is normally taken after PHYS 150. Topics covered include electrostatics, circuits, magnetostatics, electromagnetic induction, heat and temperature, thermodynamic engines, and ideal gases. This course is taught in an activity based workshop format. Prerequisites: 150 (or 135A) and Math 141B (may be concurrent). One semester, 5 credits.

## 205 Electronics and Computer Interfacing*

An introduction to electronics and computer interfacing of small-scale laboratory experiments. Topics include: An overview of basic electrical circuit theory; the design and use of digital circuits using logic gates, flipflops, etc; the design and implementation of computer interfacing schemes for small scale experiments in physics, biology, and chemistry using commercial interfacing hardware and software. Combined lecture and lab meets for three hours twice per week. Students will complete a final project involving interfacing of an experiment relevant to their majors and interests. One semester, 3 credits.

## 250 Computational Oscillations and Waves

Analysis of damped and driven oscillators and resonance phenomena in various physical contexts; coupled oscillators and modes. Solutions of the wave equation, superposition, traveling waves, standing waves. Introduction to non-linearity. Heavy use of computers and computational techniques are stressed throughout the course. Prerequisites: 150 (or AP Physics) and Math 141B. One semester, 3 credits.

## 260 Search for Extraterrestrial Life

 Cross-listing of INTD 217, intended for physics majors completing the astronomy emphasis. Content will be the same as INTD 217 , with the addition of an appropriate technical assignment for those completing the course under the physics cross-listing. Prerequisite: 250. One semester, 4 credits.
## 275 Optics and Modern Physics

Geometrical and physical optics, wave-particle duality, quanta, atomic and nuclear physics, elementary particles. Prerequisite: 180 and Math 241 (may be concurrent). One semester, 4 credits.

## 310 Mechanics*

Systematic exposition of Newtonian mechanics; conservation laws, systems of particles, rigid body motion, central forces and orbital mechanics, non-inertial reference frames. Lagrange's and Hamilton's equations of motion. Special relativity. Prerequisites: 250, 275. One semester, 3 credits.

## 315 Statistical Physics*

Physics of large-scale systems consisting of many particles. Statistical mechanics, kinetic theory, thermodynamics, and heat. Introduction to quantum statistics. This course has an emphasis on computation. Prerequisites: 250, 275. One semester, 3 credits.

## 320 Optics*

The nature of light. Geometrical, physical, and quantum optics. Light rays, lenses, and optical instruments. Light waves, superposition, interference, and diffraction. Photons, spectra, lasers, interferometry, fiber optics, and nonlinear optics. Prerequisites: 250, 275. One semester, 3 credits.

## 330 Electromagnetic Theory*

Electro- and magneto- statics in vacuum and in matter, scalar and vector potentials, and electrodynamics. Maxwell's equations and electromagnetic waves. Prerequisites: 250, 275. One semester, 3 credits.

## 350 Quantum Mechanics*

General formalism; operators, eigenfunctions and eigenvalues. The Schrodinger equation. One dimensional quantum systems. Angular momentum. Prerequisites: 250, 275. One semester, 3 credits.

## 360 Astrophysics*

Stellar structure, stellar spectra, nuclear energy generation, and stellar evolution. The interstellar medium, galaxy structure and dynamics, and cosmology. Prerequisites: 250, 275. One semester, 3 credits.

## 375 Solid State Physics*

Crystals and electrons in crystals. Crystal structures and binding. The reciprocal lattice and phonons. Free electron gas, energy bands, and Fermi surfaces. Metals, semiconductors, insulators, and superconductors. Electronic and magnetic properties of solids.
Prerequisites: 250, 275. One semester, 3 credits.

## 380 Experimental Physics*

Laboratory experiments taken from a wide variety of topics in physics including experiments of historical importance, atomic and nuclear physics, $x$-ray physics, condensed matter physics, and signal processing. Error analysis and statistical treatment of data. Prerequisites: 250, 275. One semester, 3 credits.

190, 290, 390, 490* Selected Topics in Physics
Variable credits. May be repeated for credit.

295, 395, 495 Independent Study
Variable credits. Permission. May be repeated for credit.

## 196, 296 396, 496 Research

Independent research under the direction of a faculty member. One semester or January, 1-4 credits. Permission. May be repeated for credit.

## 499A, B Senior Seminar I, II

Readings will be assigned from both text books and major journals, and students will be expected to engage in independent library research. Each student will give several presentations based on these readings. Students will complete a significant independent study project, leading to a major term paper that satisfies Whittier College's Paper in the Major requirement, and a presentation open to the entire college community. Prerequisite: Permission of the instructor. Two semesters. 499A, l credit, in the Fall and 499B, 2 credits, in the Spring.
*Not offered every year.

Frederic A. Bergerson<br>Eric Lindgren<br>Joyce P. Kaufman<br>Michael J. McBride<br>John H. Neu<br>Deborah R. Norden, Chair

lato once suggested that the wise who refuse to participate in the affairs government are punished by having to live under the rule of fools. The Political Science Department hopes to develop wisdom in its own majors and all students so that they may be effective participants in the political world, whether as practitioners of politics or as citizens in their community. To this end, the Department acquaints students with the nature of political behavior and the substance of politics through the systematic analysis of political phenomena. The Department offers special programs such as Model United Nations, the Washington Winterim, the International Negotiations Project, internships, field research experience, and participation in Pi Sigma Alpha, the National Political Science Honor Society. The Department also provides background and career guidance for such areas as law, public and international administration, planning and policymaking, politics, teaching, journalism, pure and applied research, and related fields.

## GUIDELINES FOR A MAJOR IN POLITICAL SCIENCE

A minimum of 36 credits, including:
American Government and Politics, PLSC 110, 3 credits
Comparative Politics, PLSC 140, 3 credits
International Relations, PLSC 220, 3 credits
Political Methodology, PLSC 280, 3 credits
Normative Political Theory, PLSC 380, 3 credits
One course in Public Administration (PLSC 260 or 362, 364 or 365), and/or Public Law (PLSC 370, 372 or 376)
One January Session course or approved equivalent
One Capstone seminar
Two additional courses, one from the subfields of American/Public
Administration/Public Law and one from International Relations/ Comparative Politics.
Students wishing to pursue an International Relations track should complete the basic requirements for the Political Science major and the following courses in International Relations and Comparative Politics:

PLSC 228; 332; 333, 9 credits
PLSC 330, 339, or 340, 3 credits
Two courses in Comparative Politics from at least two regions, 6 credits

In addition, students pursuing this track should take at least 2 years of a foreign language and other appropriate courses as recommended by the Department.
Students are also encouraged to participate in an overseas or off-campus program that is either language-based or has a political science or international relations component.

## GUIDELINES FOR A MINOR IN POLITICAL SCIENCE

A minimum of 18 credits, including PLSC 100 or 110 , selected in consultation with the department minor advisor to fulfill one of the following emphases:
General Emphasis: At least one course in four of the following subfields: American Politics; Public Administration and Law; International Relations; Comparative Politics; and Political Theory.
Subfield Emphasis: 12 credits taken in one or two related subfields.

## COURSE DESCRIPTIONS (PLSC)

## Introductory Courses

## 100 Introduction to Political Science

Political Science as the study of political behavior from various perspectivesindividual, group, national, and international; exploring the role of science, values, and theories in the study of politics and providing examples of American, comparative, and international politics. Students participate in a simulation exercise to experience major aspects of political behavior. Each department member participates in some aspect of this course. One semester, 3 credits.

## American Politics

## 110 American Government and Politics

A historical and institutional examination of the founding debate. US political branches, political behavior, and the policy process in the United States, focusing on the definition and realization of democracy, as well as civil liberties and civil rights. Satisfies the state teaching credential requirement in American Constitution. One semester, 3 credits.

## 205* Women in American Politics

Examines the changing role of women in American politics and society, including the suffrage movement, the ERA, work and career patterns. One semester, 3 credits.

## 207* Elections and Participation

This course will examine the electoral process in the United States at all levels of government, focusing on apportionment and gerrymandering, campaign financing, and television advertising. We will also examine social movements and other means of political participation. One semester, 3 credits.

208 California Politics and Government
The political process in Californianominations and elections; structure and operation of state and local institutions; leading policy problems. One semester, 3 credits.

## 302 The President and Congress

Development of the presidency and Congress, their functions, relationships, and problems; comparative consideration of other political, executive and legislative bodies. One semester, 3 credits.

## 303* Race and Ethnicity in American Politics

This course looks at the struggle for civil rights and civil liberties among racial minorities since the nation's founding. Special attention will be paid to different theories of race and racism in this course. Prerequisite: 110 or permission. One semester, 3 credits.

## 304 Political Parties

An examination of the development and evolution of American political parties, focusing on the role of parties in government, in the electorate, and as institutions. We will also examine the founding debate on factions, the US two-party system, a comparative analysis of parties in the world, and third parties. Prerequisite: 110 or permission. One semester, 3 credits.

## 305* Washington Winterim

Field work, on-the-scene learning experience in Washington, D.C. Lectures, discussions, briefings, site visits, and individual research projects on aspects of national politics, government, and public policy. Permission. January, 4 credits.

306* The Media and the Political Process We will examine the US media landscape, looking at the role of media in a democracy. Additional topics include: media consolidation, media bias, war coverage, the rise of the internet as an alternative media source, and media coverage of elections. One semester, 3 credits.

## 312* Urban Politics

This course examines the historical development of US cities, and their configuration in the federal system. We will discuss the rise of the sunbelt, the flight to suburbs, and land use and zoning issues, as well as looking at the lingering effects of racial segregation and discrimination in the US cities. One semester, 3 credits.

## 315* Politics Beyond the Classroom

Direct observation and analysis of practical politics through field trips, personal investigation, and small group discussion; TV, the press, public relations, parties, and lobbying as they relate to campaigns, elections, the political process, and public policy. Involves interviews with political leaders and visits to government institutions. Course culminates with field trip to the state capitol in Sacramento. Additional charge involved, personal transportation may be necessary. Permission. January, 4 credits.

## 400* Seminar in American Politics

Seminar dealing with such subjects as American political parties, nominations, campaign, elections, voting behavior, interest groups, and the political novel. Permission. One semester, 3 credits.

## International Relations

## 28 Model UN Conference

Participation in annual conference of Model United Nations of the Far West. Permission. May be repeated for credit. One semester, 1 credit. Prerequisite: 228

## 220 International Relations

Development of international politics since World War I; basic concepts and theories regarding political interaction among nationstates, emphasizing national interest and security, the exercise of power and its limits, and international conflict and cooperation. One semester, 3 credits.

## 225* Problems and Policies in Contemporary Politics

Focuses on a major problem in contemporary politics; opportunity for in depth analysis of the problem's background, current status, and prospects for resolution. January, 4 credits.

## 228* International Organization

An examination of the nature of international organization and globalist theory; special emphasis on the United Nations: its role in peace and security, economic and social affairs, sustainable development, humanitarian affairs, and human rights; the role of member states and non-governmental organizations; preparation for the Model United Nations of the Far West conference. One semester, 3 credits.

## 330 Human Rights

The nature of human rights and their role in the global community; how human rights are established, defined, monitored, and enforced with special emphasis on the role of the United Nations in this process; major issues and problems in the area of human rights. Open to Sophomore standing and above. One semester, 4 credits.

## 332 American Foreign Policy

Historical evolution of American foreign policy from independence to the present; the decision-making process; problems and prospects in contemporary foreign policy. One semester, 3 credits.

## 333* International Political Economy

Surveys an influential area of international relations that analyzes the interplay of politics and economics in the international milieu. While the course focuses on contemporary debates over the importance of economic variables in political systems, these issues are analyzed within the context of formative debates such as realism vs. idealism; neomercantilism vs. laissez faire; and dependency vs. neoinstitutionalism in a variety of regional settings. Prerequisite: 220 or permission. One semester, 3 credits.

335 International Relations of Latin America Examines relations between and among Latin American countries, looking at competition, conflicts and efforts at cooperation. Includes attention to cross-border challenges such as migration, narcotics trafficking and political insurgency, as well as dealing with Latin American efforts to enhance regional trade and
democratization. Prerequisite: 140 or 220 or permission. One semester, 3 credits

339* Military Strategy and Arms Control An examination of the development and application of military strategy, focusing on concepts such as deterrence, preemption, weapons of mass destruction and counterterrorism, with emphasis on the current and future roles of arms control in national security policy. One semester, 3 credits.

420* Seminar in International Relations Survey of international relations theories and methodological problems in research; completion of independent research project. Permission. One semester, 3 credits.

## Comparative Politics

## 140 Comparative Politics

Compares different ways of organizing politics in more and less developed countries in various regions of the world. Primary themes include political legitimacy and authority, representation, and patterns of political change. One semester, 3 credits.

## 245 From Russia With Feeling

Russia-the interaction of history, culture, literature, and politics; life under the Tsars, the Bolshevik revolution, the Stalinist purges, Russia at war; and modern Russian politics through lectures, serious games, films, and literature. January, 4 credits.

## 252 Latin American Politics

Comparison of political systems of Latin American nations; emphasizes dynamics of political change and problems of democracy. Prerequisite 140 or permission. One semester, 3 credits.

## 253 Politics of Diversity in Latin America: Race, Religion and Gender

Using film, explores the origins, organization and political implications of ethnic, religious and gender diversity in Latin America, from colonialism through the present. January, 4 credits.

## 340 Political Violence

Explores the motivations and causes of political violence, including guerrilla warfare, terrorism, military coups d'etat and genocide, looking at various regions of the world. Prerequisite: 140 or 220 or Permission. One semester, 3 credits.

341* Western European Political Systems
Comparison of political processes in the major nations of Western Europe; the interaction of historical, cultural, economic, and political patterns. One semester, 3 credits.

## 346* Russian and East European Politics

Eastern Europe in transition: an analysis of the political, cultural, economic, and historical factors that led to changes in the former Soviet Union and Eastern Europe and consideration of future alternatives for the region. One semester, 3 credits.

## 348* East Asian Political Systems

Comparative analysis of political development and change in China and Japan; problems of ideology, national integration, economic development and post-industrial growth, political participation, and political stability. One semester, 3 credits.

## 349* Southeast Asian Politics

Analysis of the politics of Southeast Asia with a focus on the post-World War II period; emphasis on Vietnam and Cambodia, and the impact of the Vietnam War on the region and on those countries' relations with other nations. One semester, 3 credits.

## 356* Middle Eastern Political Systems

Comparative approach to the heritage and institutions of Islam and Israel; stresses problems of political development and ArabIsraeli relations. One semester, 3 credits.

## 358* African Political Systems

Comparative study of political change in Africa south of the Sahara; traditional political systems, colonialism, nationalism, and problems of nation-building and development. One semester, 3 credits.

359* North American States and Identities: Historical Transformations
Interprets historical transformations which began in Africa, the Middle East, and Europe and continue in North American society, including the rise of the modern state, the multifarious formations of identities and the continuously changing mechanics of maintaining identities as new ideas challenge the family, everyday life practices, networks of loyalty, and motivational patterns. One semester, 3 credits.

## 440* Seminar in Comparative Politics

Substantive and methodological problems in comparative politics research; completion of independent research project. Permission. One semester, 3 credits.

## Public Administration and Law

260* Public Administration and Policy Policy-making, management, personnel, and budgeting in the context of political administrative responsibility, tensions between the classic democratic model and bureaucratic planning; methods used to study public policy; policy formulation, implementation and impacts; contemporary issues and compliance problems. One semester, 3 credits.

## 362* Federalism and Urban Life

Team research considers the impact of federal, state, and local programs on local political and social life; may include housing, poverty, the environment, crime and punishment, and mass transportation issues. Permission. May be repeated for credit. One semester, 3 credits.

## 364* Complex Organizations

An analysis of the phenomena and theories of large, complex, formal organizations. Studies the organization as an economic, social, decision-making, bureaucratic, and political system. One semester, 3 credits.

365 Warfare: In Pursuit of Military Security Examines war as a human activity, raising issues of civil-military relations, organizing for war, notions of a military-industrial complex, and philosophical, psychological and political aspects of war. Includes guest speakers, films, and field trips. Designed to capture the reality of combat and its costs; to familiarize students with key political, philosophical, and psychological issues of war and peace. Helps students to understand combat. January, 4 credits.

## 370* Introduction to Judicial Process and Behavior

Judicial decision-making processes; recruitment, socialization, and behavior of judges and lawyers; other participants in the judicial process; relationships with other policy-making institutions. One semester, 3 credits.

## 372 American Constitutional Law

The Supreme Court's role in the governing process; constitutional questions on separation of powers, federalism, and government property relationships; civil rights and liberties. Satisfies the state teaching credential requirement for American Constitution. One semester, 3 credits.

## 376* Law and the Courts

The U.S. judicial process in selected areas of public law and criminal justice; emphasis on reforming and perfecting the system. January, 4 credits.

## 460* Seminar in Public Policy

Seminar will focus on a vital topic of public policy, emphasizing administrative aspects of policy making and implementation. Permission. One semester, 3 credits.

## 470* Seminar in Public Law

Seminar dealing with such subjects as jurisprudence, constitutional law, civil rights, and judicial process. Permission. One semester, 2 or 3 credits.

## Political Theory

## 280 Political Methodology

An examination of the major and issues of empirical political science and the use of simulation in the development of theories or models. One semester, 3 credits. Prerequisite 110 or 140 or 220 or Permission.

## 380 Normative Political Theory

Western political philosophy from Plato to Marx: the development of normative theory and its relevance to modern political analysis and contemporary politics; emphasis on Plato, Aristotle, Machiavelli, Hobbes, Locke, Rousseau, and Marx. Prerequisite sophomore standing. One semester, 3 credits.

## 480* Seminar in Political Theory

Seminar dealing with such subjects as normative political thought, empirical political theory, and political literature. Permission. One semester, 2 or 3 credits.

## Additional Offerings

190, 290, 390, 490* Selected Topics in Political Science
Variable credits. Permission. May be repeated for credit.

## 295, 395, 495 Independent Studies

Credit and time arranged. Permission. May be repeated for credit.

## 496 Internship

Supervised field experience in local, state or national government, law, and practical politics. International organizations, interest groups, and non-governmental organizations with political missions may be considered. Permission. One semester, variable credits. May be repeated for credit.
*Not offered every year.

Lorinda B. Camparo<br>Charles T. Hill<br>Lucy A. O'Connor, Emerita<br>Karen Redwine<br>Ayesha Shaikh<br>David B. Volckmann, Chair

Sychologists are concerned with advancing knowledge of behavior and experience. Psychology courses provide background in the social, cultural, developmental, mental, emotional, and biological bases of behavior. The primary goal of the psychology curriculum is to enable students to think like psychologists, that is, to study behavior and experience from a psychological perspective. Achieving this goal requires critical thinking and communication skills as well as knowledge of psychological theories and research methods. It also requires understanding relationships between psychology and other disciplines. In addition, the psychology faculty is concerned with individual development, including self-awareness and understanding others of diverse backgrounds. Coordinated programs across the entire psychology curriculum focus on writing, research, and diversity. There also are opportunities for independent scholarship and collaborative research with faculty. Students are broadly prepared for graduate studies and for fields of employment that apply methods and principles of psychology. Previous majors have pursued a wide range of careers including social services, medicine, business, education, the arts, international relations, and law, as well as specific branches of psychology.

## GUIDELINES FOR A MAJOR IN PSYCHOLOGY

Those planning to major in Psychology must consult with a Psychology advisor to ensure timely completion of requirements.

A minimum of 36 credits, including:
Introductory Psychology, PSYC 100, 3 credits
Biological Bases of Behavior, PSYC 222, 3 credits
Experimental Psychology PSYC 212, 4 credits \& Experimental Psychology lab, PSYC 212L, 0 credits
Statistics, PSYC 314, 4 credits \& SPSS lab, PSYC 314L, 0 credits
Literature Review Seminar, PSYC 415, 3 credits
Senior Presentation, PSYC 499, 1 credit
One 300-level laboratory course, selected from:
Behavioral Neuroendocrinology, PSYC 326, 4 credits
Sensation and Perception, PSYC 332, 4 credits
Psychology of Learning, PSYC 334, 4 credits
Techniques of Behavior Change, PSYC 335, 4 credits

Cognitive Psychology, PSYC 336, 4 credits
Clinical Communication, PSYC 376, 4 credits
At least 14 units of electives in psychology at the 100 level or above.
One science course outside the field of psychology, excluding MATH and COSC, 3 credits
Due to prerequisites, the following course sequence is strongly recommended:
Freshman year - 100, 222;
Sophomore year - 212/212L, 314/314L (preferably concurrently);
Junior year - one 300-level laboratory course;
Senior year - 415 \& 499

## GUIDELINES FOR A MINOR IN PSYCHOLOGY

Those planning to minor in Psychology must consult with a Psychology faculty member to ensure timely completion of requirements.
Required for a minor are 16 to 20 credits including:
PSYC 100;
One laboratory course chosen from: PSYC 212, 326, 332, 334, 335, 336, 376;
Nine credits chosen from: PSYC 212, 222, 242, 334 or 336, 352, 362, 372; and
One additional 3-credit or 4-credit course at the 200 level or above.

## COURSE DESCRIPTIONS (PSYC)

## 85 Forensic Psychology

Forensic Psychology is the application of psychological insights, concepts, and skills to the understanding and functioning of the legal and criminal justice system. This course will address current theoretical and empirical issues in the study of psychology and law. Topics may include eyewitness testimony, credibility assessment, jury decision making, child abuse and memory for traumatic events, juvenile delinquency and criminology, prediction of violence, and insanity defense. January, 3 credits.

## 89* States of Consciousness

Ordinary and non-ordinary states of consciousness; meditation, sleep and dreaming, biofeedback, psychoactive drugs, schizophrenia, depression, sensory deprivation and overload, and social identity. Laboratories, guest speakers, and demonstrations. January, 4 credits.

## 92 Psychology of Human Sexuality

The psychology and psychobiology of human sexual responses; the development of normal sexuality; sexual deviations and incompetencies, and remediation of sexual problems. One semester, 3 credits.

## 100 Introductory Psychology

An introduction to major areas of psychology, emphasizing theories, research methods, critical thinking, and communication skills, to enable students to think like psychologists. Topics include the brain and nervous system, child development, sensory processes, perception, consciousness, learning, memory, language development, motivation, emotion, intelligence, personality, stress, abnormal behavior, social influence, and close relationships. Class exercise forms are discussed in groups of four to provide interactive learning even in a large lecture class. One semester, 3 credits.

## 148 Field Work

Participation in psychologically relevant experiences in a supervised setting, plus weekly seminar. Placements arranged to meet interests and goals of individual students, such as working with children or adults in a community agency, etc. Prerequisites: 100, other relevant coursework, and instructor permission. One semester, 3 credits.

212/212L Experimental Psychology and
Experimental Psychology Lab Basic research designs and scientific methods
for testing theories of sensation, perception, motivation, cognition, animal learning, and social psychology. Lecture and laboratory. Prerequisite: 100. One semester, 4 credits.

## 222 Biological Bases of Behavior

Introduces the neural, genetic, biochemical, and structural mechanisms that underlie normal and abnormal human behavior. Lecture, films, and visual aids. Prerequisite: 100. One semester, 3 credits.

## 242 Child Psychology

Introduces the major theories and issues relevant to physical, emotional, social, and cognitive development from conception through preadolescence. Includes consideration of ethical issues relevant to the study of children, live observations of typically developing infants, preschool-, and school-age children in natural settings, and a presentation on autism. Prerequisite: 100 and instructor permission. (Not open to those who have taken CHDV 105.) One semester, 3 credits.

## 244 Psychology of Adolescence

Introduces the major theories and issues relevant to the physical, emotional, social, and cognitive development of adolescents in the family, peer, school, and work contexts. Includes field trips to local middle and high schools, face-to-face interviews with adolescents, and guest speakers on sexuality and emotional/behavioral disorders. Prerequisite: 100. One Semester, 3 credits.

## 284* History of Psychology

History of psychological thought and systems from classical times to the present. Major psychological theories and theorists are studied in relation to the broader context of intellectual and social history. Prerequisite: 100. One semester, 3 credits.

## 314/314L Statistics and SPSS Lab

Data analysis in the social sciences; analysis of distributions, central tendency, variability, correlation, and parametric and nonっparametric statistical tests; use of SPSS program for statistical analysis. Prerequisites: Score of 2 or higher on the Math Placement test or Math 76, and sophomore standing. One semester, 4 credits.

## 324 Cognitive Neuroscience <br> The neurological basis of cognition. Examines

how the functions of the physical brain can yield the perceptions, thoughts, and ideas of an intangible mind. Material is drawn from research in psychology, clinical neurology, and the neurosciences with brain injured and healthy humans, as well as non-human subjects. Topics covered include perception, object recognition, hemispheric specialization, attention and consciousness, social cognition, and the control of motor action. Prerequisite: 222. One semester, 3 credits.

## 326* Behavioral Neuroendocrinology

The study of interactions among behavior, genes, and neuroendocrine systems, focusing on a variety of behaviors, such as reproduction, eating and drinking, responses to stress, learning and memory, aggression and parental behaviors. Lecture and laboratory. Prerequisite: 222. One semester, 4 credits.

## 328* Neuropsychopharmacology

This course covers topics in behavioral pharmacology, with a focus on how drugs affect the brain and behavior. There is an emphasis on psychoactive drugs, mainly drugs of abuse, but there will also be discussion of anti-anxiety drugs, antidepressants, and antipsychotics. Although the primary emphasis of this course will be on neurobiological and behavioral effects of drugs, social, cultural, and political aspects of drug use will be touched upon when appropriate. Prerequisite: 222. January, 3 credits.

## 332* Sensation and Perception

Considers human and animal sensory abilities and limitations, and how they are reflected in their perceptions of the world; the nature and development of these perceptions, and the circumstances that distort them. Seminar, discussion, and laboratory. Prerequisites: 222. One semester, 4 credits.

## 334* Psychology of Learning

Human cognition and animal learning covering basic phenomena in classical and instrumental conditioning, memory, language learning, concept formation, problem solving, and thinking. Lecture and laboratory. Prerequisite: 100. One semester, 4 credits.

## 335* Techniques of Behavior Change

Principles of learning theory; application of behavior-change techniques to human behavior in various settings, including
designing and evaluating behavior-change programs; consideration of ethical issues. Lecture, laboratories, field observations, and guest speakers. Prerequisite: 100. Recommended: 212. January, 4 credits.

## 336* Cognitive Psychology

The study of human thought processes and mental representations including topics such as attention, perception, memory representation and improvement, mental imagery, thinking, and artificial intelligence. Lecture and laboratory. Prerequisite: 212. One semester, 4 credits.

## 338* Motivation and Emotion

Theory and research regarding the biological, behavioral, and social bases of motivational and emotional behavior. Prerequisite: 100. Recommended: 212. One semester, 3 credits.

## 348* Psychology of Aging

Current theories, issues, and research on adulthood, with emphasis on cognitive and personality changes occurring during middle and old age. Prerequisite: 100. One semester, 3 credits.

## 352 Social Psychology

Issues, theories, and research in social psychology; non-verbal communication, person perception, attitudes, social influence, aggression and helping, social exchange, interpersonal relationships. Prerequisite: 100 or SOC 100. One semester, 3 credits.

## 354 Diverse Identities

Theory and research on processes of identity formation and change. Topics include ethnic, racial, national, religious, gender, sexual, occupational, familial, and other identities. Analyzes stigma, prejudice, discrimination, and conflict from a global perspective. Prerequisite: 100 or SOC 100 or junior standing. One semester, 3 credits.

## 362* Psychology of Personality

Study of major theories of personality, as well as the empirical and clinical research that illustrates and tests them. Prerequisite: 100. One semester, 3 credits.

## 364* Psychology of Women

Theoretical and empirical approaches to the study of the psychology of women; the effects
of social context and the interplay of gender, race, class, and culture on psychological development, with special attention to where and how women fit into the world including the ways in which they have been and continue to be marginalized in various cultures.
Prerequisite: 100. One semester, 3 credits.

## 368* Psychological Assessment

Provides an introduction to psychological assessment and measurement theory by examining the measurement of cognitive abilities, personality, and preferences. Includes development, administration, and interpretation of psychological assessment instruments. Prerequisite: 314. One semester, 3 credits.

## 372 Abnormal Psychology

Study of the description, causes, and treatments of dysfunctional behaviors; includes both clinical and empirical research perspectives. Prerequisite: 100. One semester, 3 credits.

## 376* Clinical Communication

Emphasis on examining the change agents in psychotherapy and learning how to develop help-intended communication skills through the use of miniature mutual support groups. Analysis of communication using a verbal response mode classification system. Lecture, discussion, and laboratory. Prerequisite: 100. One semester, 4 credits.

## 396* Research Practicum

Opportunity to learn and apply research skills by assisting faculty on research. May include research design, literature search, subject recruitment, data collection, data analysis, and disseminating findings through presentation or publication. Prerequisite: 100 and instructor permission. One semester. Variable credits. May be repeated for credit.

## 415 Literature Review Seminar

Seminar designed to guide the student in choosing a viable literature review topic, conducting an exhaustive literature search, and writing a scholarly literature review paper (using APA 6th edition format) on a topic of the student's choosing. Prerequisites: 212/212L, $314 / 314 \mathrm{~L}$ and senior standing. Co-req: PSYC 499. One semester, 3 credits.

417* Research Seminar
Advanced seminar to gain individual experience in conducting psychological research involving collection and analysis of data to test theoretical models. Recommended for psychology majors planning to attend graduate school. Prerequisites: 212 and 314 . One semester, 3 credits.

## 496 Independent Research

Opportunity to conduct independent individual research. Prerequisites: 212 and 314 and instructor permission. Credit and time arranged.

## 499 Senior Presentation

Fulfills the Senior Presentation requirement of the college Liberal Education program. Students will prepare and make a Power Point presentation based on their Literature Review paper from Psych 415. Prerequisites: 212, 314, and senior standing. Co-requisite: 415. One semester, l credit.

190, 290, 390, 490* Selected Topics in Psychology
Variable topics and credits. Prerequisite 100. May be repeated for credit.

295, 395, 495* Independent Study Credit and time arranged. Prerequisites: 100, instructor permission, and extensive background in psychology or other social sciences. May be repeated for credit. Not offered every year.

Jason A. Carbine

Rosemary P. Carbine

Marilyn Gottschall, Chair
Joseph L. Price

$\tau$
Religious Studies curriculum at Whittier College equips students with skills to understand and interpret the complex role of religion in society, past, and present, local and global. Focusing on religion as a social institution and as a significant component of cultural diversity, the program induces students to investigate how religious traditions are embedded in local environments. Because of its diverse character, the greater Los Angeles region provides an ideal opportunity for filed trips and other activities that encourage students to apply and enhance what they learn in the classroom setting. The program sees the inquiry into religious practices and beliefs as an occasion for becoming self-conscious about both theoretical issues in the stud of religion and the search for meaning and values.

## GUIDELINES FOR A MAJOR IN RELIGIOUS STUDIES

A minimum of 36 credits, of which 18 must be at the 300 level or above:
Introductory Course: REL 101 OR REL 200, 3 credits
REL 361, Ways of Understanding Religion
REL 495, Directed Study, 3 credits
REL 499, Senior Portfolio, 1 credit

At least six credits in each of the three categories:
Global Religions
Religions: Comparisons and Contrasts
Religions: Cultural Critique
Students who major in Religious Studies must have one of the Religious Studies faculty as their advisor.

## GUIDELINES FOR A MINOR IN RELIGIOUS STUDIES

A minimum of 18 credits, including REL 101 and 12 additional credits chosen from Religious Studies courses taught by faculty whose primary appointment is in the Religious Studies Department.

## COURSE DESCRIPTIONS (REL)

## Introductory Courses

## 101 Religious Diversity in America

An introduction to religious studies focusing on greater Los Angeles, which some experts claim is the most religiously diverse environment in the world. Attention to traditional Catholic, Protestant, and Jewish religions; recent immigrant traditions; religious innovation and change; and the implications of religious pluralism. Field trips. One semester, 3 credits.

## 200 Exploring Religion

What kinds of questions are religious questions? What role does religion play in human life? What are some of the ways in which religion can be studied? Examples from various theoretical perspectives and from various religious traditions. One semester, 3 credits.

## Global Religions

## 201 Monotheisms

An introductory survey of major texts, beliefs, and practices of Judaism, Christianity, and Islam. One semester, 3 credits.

## 202 Religions of Asia

An introductory survey of major texts, beliefs, and practices of religions across Asia, from India to Japan. Religions covered include Hinduism, Buddhism, Islam, Sikhism, Jainism, Confucianism, Taoism, and Shinto. One semester, 3 credits.

## 210* Introduction to the Bible

An introduction to biblical literature and the social contexts in which the Hebrew Bible and New Testament arose. Emphasis on contemporary critical methods used to understand the Bible. One semester, 3 credits.

## 216* Literature of the Bible

(Same as ENGL 222) One semester, 3 credits.

## 221* History of Christianity

This course explores aspects of the intellectual, cultural, and institutional history of Christianity, by examining its central beliefs and practices; its societal and ecological concerns; its changing attitudes to church-state relations and to religious diversity; and, its inculturation in global contexts beyond Europe and the Americas. One semester, 3 credits.

## 222* Judaism

A survey of the major issues, themes, and practices of the Jewish religion and civilization. The Jewish tradition's place in the development of western civilization as seen in historical overview: from biblical times to rabbinic and medieval times to the modern era. One semester, 3 credits.

## 235, 236 Arabs and Muslims I \& II

(Same as INTD 225, 226) Two semesters, 3 credits each.

## 311 Life and Teachings of Jesus

This course explores the life and teachings of Jesus of Nazareth in early Christian canonical and non-canonical gospels. Examines significant religious, socio-cultural, and political issues that shaped early Christian communities, beliefs, and texts. Topics include gospel as a literary and religious genre; theories and methods of textual criticism; the canonization of sacred texts; men's and women's religious leadership; and competing understandings of the divine, salvation, and religious life and practice. One semester, 4 credits.

## 313* Heroes, Gods and Gurus: Introduction to the Literatures of India

An exploration of the complex and amazing world of classic Hindu literature, with a focus on either the Mahabharata or Ramayana (the focus alternates each semester the course is taught). We examine either the Mahabharata's or Ramayana's basic story and characters and seek to learn about their cultural context and impact, across centuries of interpretation and practice. One semester, 3 credits.

## 330 The Buddha and Buddhism

A study of major aspects of the history and practice of Buddhist traditions throughout Asia as well as the West. Students learn, for example, about Buddhism in Sri Lanka, India, Burma, and the United States. Field trips, videos. One semester, 3 credits.

## 331* Islam

An introductory thematic survey of Islam with some attention to the historical development of the tradition. Principal themes include: the Qur'an, ritual practice, Islamic society, mysticism, the diversity of the Islamic world, Islam and modern politics. Readings from a variety of perspectives. Field trip. One semester, 3 credits.

## 332* Looking for Islam

Taught in an immersion setting (Morocco), the course focuses both on the varieties of religious expression within a single culture, and on its forms of expression in everyday life. Jan term, 4 credits

## 333* Hindu Religion and Culture

India's principal religious tradition viewed primarily in terms of its variegated expression in contemporary south India. Topics include Hindu gods, temples, and their festivals, asceticism and monasticism, the caste system, Hindu women and domestic ritual, and the philosophical underpinnings of the tradition. Films and slides. One semester, 3 credits.

## 334* Religions of China and Japan

Investigates religious traditions as they have developed in China and Japan. Topics include "popular" religion; classical and contemporary teachings and practices of Confucianism, Taoism, and Buddhism (especially Zen); the challenge of Communism to religion in China; the rise new religious movements in contemporary Japan; Christianity in East Asia (especially Japan); and Buddhism in the West (with specific attention to the United States). One semester, 3 credits.

## Religions: Comparisons and Contrasts

## 241* Sport, Play and Ritual

(Same as INTD 241) January, 4 credits.

## 251* Monks, Nuns and Ascetics

This course examines theological, practical, and literary traditions of asceticism in Christianity, Hinduism, and Buddhism. Topics include men's and women's disciplinary and visionary practices, the roles of ascetics in political protests, and gender in religious life. One semester, 3 credits.

## 253* Women and Religion

An introductory examination of religious definitions of women, of women's religious experiences, and of feminist theologies and transformation of religious traditions. Attention to course topics in cross-cultural perspective. One semester, 3 credits.

## 307* Religion and the Body

An exploration of the ways in which the interpretations, corporeal practices, and ideologies of diverse religious traditions mediate social meaning. Includes such topics as food and fasting; medicine, healing, and illness; pleasure and pain; representations of the body; sex and reproduction; biological aspects of religion (brain, mind, soul) and religious experience. One semester, 3 credits.

## 321* Religion in America

Distinct religious movements, themes, and personalities in American history before 1870. Topics include native American religions, Puritanism, California missions, revivalism, frontier religion, and transcendentalism. One semester, 3 credits.

341* New Religious Movements: An examination of how California's cultures spawn and embrace emergent religious groups. Representative NRMs include both innovated and transnational religious groups. One semester, 3 credits

## 342* Sound and the Religious Experience:

Focuses on the cultural uses of sound and the physiological processes that lead to religious experience. Emphasis on the role of chant and trance in inducing religious states. One semester, 3 credits

## 348* Ritual Studies

An integration of theoretical and interdisciplinary perspectives on ritual as sacred performance. It examines the connection between practice and belief in a series of cross-cultural case studies and is organized thematically around such issues as sacrifice, death and dying, food, the body, and lifestage events. One semester, 3 credits.

## 349* Religious Fundamentalisms

An examination of the roots and expansion of religious fundamentalism throughout the modern world. Topics include Protestant fundamentalism in England and the United States, the Muslim Brotherhood in Egypt, and fundamentalism in Jewish, Buddhist, Hindu, and Sikh traditions, among others. One semester, 3 credits.

## 352* Pilgrimage

A study of pilgrimage as a cross-cultural phenomenon. Attention to the history, literature, ritual, and social processes of religious journeys of several religious traditions, such as Christianity, Islam, Buddhism, and Hinduism. One semester, 3 credits.

## 353* Person, Cosmos, Community

An examination of selected ways in which humans have conceptualized the universe and how these various conceptions influence different understandings of humankind's place within the cosmos, prescriptions for human social order, and attitudes toward the non-human world. Readings concern narratives of creation from various religious traditions, accounts of religious rituals closely tied to myths about cosmic origins, and a range of materials dealing with ethics and understanding others, drawn especially from the lives and work of contemporary Buddhists, Christians, Jews, Hindus, Muslims, and Feminists. One semester, 3 credits.

## Religions: Cultural Critique

## 240* Cinema and Religion

Contemporary cinema as a medium for raising religious questions in a secular context and as a medium for exploring the religious dimensions of rituals. Issues and themes include the pursuit of truth and justice, the threat of evil, confrontation with death, experience with grace and transformation through faith. One semester, 3 credits.

340* Global Ethics: An examination of contemporary ethical issues from theological and secular perspectives. Topics include environmental issues, world hunger, poverty and inequality, nuclear arms. One semester, 3 credits.

## 345* Jesus on Film

An examination of various films about the life of Jesus, ranging from traditional portrayals to provocative ones. Emphasis on how aesthetic, political, social, and theological dispositions affect the portrayals. Selected films include foreign, epic, and musical presentations. One semester, 3 credits.

350* Latin American Liberation Theologies
An introduction to the understanding of justice as the central theological concern for the oppressed peoples of Latin America. Distinctive features of the cultures and theologies in different countries are examined. One semester, 3 credits.

## 351* Public and Popular Religion

This course examines religious communities and themes in recent U.S. history, society, and politics since 1870. Topics include civil religion, Mormonism, African American as well as Latino/a traditions, religious approaches to prosperity and poverty, the rise of religious fundamentalisms, the roles of women in public religion, and intersections between religion and politics, especially the U.S. presidency. One semester, 3 credits.

## 359* Religion and Colonialism

An exploration of several classics in the study of religion that focuses on how these works reflect the connection between European theories about "native" and "primitives," and the expansion of European political and economic power into environments inhabited by these "natives." One semester, 3 credits.

## 361 Ways of Understanding Religion

Provides students with insight into how modern scholars have explained religion. Perspectives entertained include the history of religions, psychology, philosophy, theology, sociology, and anthropology. One semester, 3 credits.

## Additional Offerings

190, 290, 390, 490* Selected Topics in

## Religion

One semester, Variable credits. May be
repeated for credit.
295, 395, 495 Independent Studies
Credit and time arranged. Permission. May be repeated for credit.

499 Senior Capstone and Portfolio, 1 credit.
*Not offered every year.

Co-Directors: Jeff Lutgen, (Mathematics)<br>Seamus Lagan, (Physics and Astronomy)<br>Participating Faculty: Jeff Miller, (Mathematics)<br>Sharad Keny, (Mathematics)<br>Glenn Piner, (Physics and Astronomy)<br>Fritz Smith, (Mathematics)

$\sigma$omputers are now employed throughout our society to perform a very wide variety of tasks. All branches of science and engineering use computing technology extensively. Sophisticated laboratory apparatus is nearly always computer-controlled. Computers are used to collect, store, and analyze large amounts of data quickly, to simulate natural systems, and to control industrial processes, among other tasks.
The Scientific Computing minor at Whittier College is designed to help prepare students majoring in one of the sciences for advanced computing work in their own fields and for work in the computer industry. The minor begins with computer programming and interfacing of computers to apparatus at the introductory level, and then continues with a range of advanced courses that allow students to focus on particular topics in scientific computing and/or broaden their computing skills. Most students will complete a research project with a significant computing component as part of the minor.

## GUIDELINES FOR A MINOR IN SCIENTIFIC COMPUTING

To be awarded a minor in Scientific Computing, students must complete six credits of required core courses and twelve credits from the list of optional courses for a total of at least eighteen credits. At least six credits of the eighteen must be at the 300 level or higher.

Core Courses
Programming I, COSC 120, 3 Credits
Intro Electronics \& Computer Interfacing*, PHYS 205, 3 Credits
Optional Courses
Programming II*, COSC 220, 3 Credits
Discrete Mathematics, MATH 220, 3 Credits
Computational Oscillations and Waves, PHYS 250, 3 Credits
Numerical Analysis*, MATH 350, 3 Credits
Mathematical Modeling*, MATH 354, 3 Credits
Research**, 1-3 Credits
Other courses with significant computing components can be considered for credit toward the Scientific Computing minor. See either of the co-directors for additional information.
*Not offered every year.
** Projects in Biology, Chemistry, Earth Sciences, Mathematics, and Physics that involve significant scientific computing. The research advisor must certify that the project involves significant computing in order for the project to count toward the minor.

Julie Collins-Dogrul, Sociology<br>Claudia Dorrington, Social Work<br>Susan Gotsch, Sociology<br>Leslie L. Howard, Sociology, Emeritus<br>David Iyam, Anthropology<br>sal johnston, Chair, Sociology<br>Ann M. Kakaliouras, Anthropology<br>Rebecca Overmyer-Velazquez, Sociology<br>Paula M. Sheridan, Social Work

asTociology is the study of social relations, associations, and institutions in human societies. It seeks to develop reliable understanding about the nature of social organization. In his work, The Sociological Imagination (1959), C. Wright Mills wrote, "Neither the life of an individual nor the history of a society can be understood without understanding both." In other words, Mills claimed that the discipline of sociology is the study of the connection between individuals and society, between personal troubles and public issues. Understanding both the life of an individual, and the history and structure of a society, requires the sociological imagination. Sociologists, according to Mills, were in the unique position among social scientists of cultivating a sociological imagination that could grasp that individuals' actions, behaviors, histories, and seemingly "personal" troubles could only be understood as effects of social organization: as public issues. Mills' hope was that through understanding the actual dynamics that shape our lives-individually and collectively-we would also develop the tools and strategies to effect positive social change.
Sociology at Whittier embraces this Millsian tradition and we believe that sociology, at its best, is not merely an academic pursuit, but rather a daily practice, a "thing lived": a hopeful act of discovery and transformation. With greater Los Angeles as our muse, we invite you to re-envision your social world, and to act in and upon it.
A major in sociology provides graduates with a solid liberal arts background for a broad variety of careers. Our graduates are employed in fields such as professional sociology, urban planning, union organizing, community development, non-profit organizations, health services, education and teaching, juvenile and criminal justice systems, social work, social research and data analysis, public administration, law, politics, racial and minority relations, business, and local, state and federal government.

## GUIDELINES FOR A MAJOR IN SOCIOLOGY

A minimum of 32 credits, including:
Introduction to Sociology, SOC 100, 3 units
Race, Class and Gender, SOC 200, 3 units
Social Theory in Social Context, SOC 302, 3 credits
Approaches to Social Research, SOC 310, or Field Research, SOC 311, 3 to 4 credits
Statistics, SOC 314, 4 credits
One course from SOC 340-359, Policy, Politics and Power, 3 credits
One course from SOC 360-389, Social Structures and Institutions, 3 credits
Senior Project Workshop, SOC 407, 0 credits
Senior Integrative Seminar, SOC 408, 3 credits.
Breadth Outside Major: this requirement can be met by any one of the following: a minor in any discipline, a second major in any discipline, or an additional 12 units above 300 in any discipline other than sociology.
Highly recommended: At least one internship or practicum experience within the Sociology, Anthropology, or Social Work offerings; proficiency in a second language; and some study outside the United States.

## GUIDELINES FOR A MINOR IN SOCIOLOGY

A minor in Sociology requires 18 credits, including SOC 100 (or approved 200 level alternative); one course numbered SOC 302 or SOC 310 or 311 ; and a total of at least 12 credits above the 300 level.

## COURSE DESCRIPTIONS (SOC)

## 14 Internship in Urban and Organizational Studies

Supervised placement in urban planning agencies and settings or in other specialized organizations. Cross-listed with SOWK 10. One semester, 2 credits.

## 100 Introduction to Sociology

A general introduction to the topics, methods, and theories of the discipline. The course will address basic social processes and institutions, including social solidarity, inequality, conflict, interaction, ideology, culture, and social structure. Open to freshmen or sophomores. One semester, 3 credits.

## 200 Race, Class and Gender

The primary goal of this course is to ensure that students develop a sociological imagination-that is, the ability to pose sociological questions and to find ways to investigate those questions. The course will be organized around three important sociological monographs-book length studies-which will examine race \& class and/or gender.

We will spend the semester meticulously breaking apart these studies so that students begin to understand the process of conducting sociological research. Prerequisite: SOC 100 or permission. One semester, 3 credits.
One semester, 4 credits.

## 260 Social Movements

An historical and comparative study of popular movements in the U.S. and internationally. We will examine how and why popular movements emerge; what sustains them; what constitutes a successful social movement; and why social movements fail. We will also pay close attention to the relationship between social movement goals and their actual effects on the larger society. One semester, 3 credits.

## 270 Death, Dying, and Bereavement

Explores historical and cultural variations in attitudes and practices surrounding death, dying and bereavement. We examine major causes of death across age and other social groups, social inequality related to death and dying, individual and social practices of grieving, and the ethics of dying in an age of technology. We study death-related issues both
at the level of social organization and in terms of how they affect people at varying stages of the life course. January, 4 credits.

## 280 Le Flaneur I

(Pre-departure course for January class in Paris). A "flaneur" is defined as "an aimless idler; a loafer...from flaner, to idle about, stroll." This class will initiate students to fields of knowledge ranging from urban studies to lietaruter all the while exploring L.A. Students will use what they learn in this class for studies and an eventual project to be completed in Paris, in January. Thought the course is in English, some language abilities are a must. Students are therefore required to enroll in a French language course or have taken courses in French at Whittier prior to the January course in Paris. Experience in sociology is strongly recommended. One semester. 3 credits.

## 281 Le Flaneur II

This is the companion course to 280 and builds on the theoretical knowledge and experiences of Le Flanuer I. Le Flanuer II takes place in Paris and uses the city to build comparative knowledge of the historical, cultural, environmental, geographical and other forces that inform the modern city. The Paris experience is intended not only to give fuller knowledge of an olternate urban environment, but should serve as a comparative tool for better understanding of Los Angeles. In order to get Liberal Education Comparative Knowledge credit, students must successfully complete both Le Flanuer I and II. Januray term. 3 credits.

## 287 Workshop in Urban Studies

The workshop uses Los Angeles and Tijuana as settings for studying urban spatial and social organization, with special attention to the design and use of public space. It examines the economic, demographic, and cultural linkages between these two areas and locates each city in terms of current global economic, social, and cultural transformations. Permission. January, 4 credits.

## 302 Social Theory in Social Context

An examination of major figures and debates in the history of sociological theory. Original works of Marx, Durkheim, Weber, will be read in conjunction with materials on the historical settings in which they wrote. Prerequisite: 100 and 200 or instructor permission. One semester, 3 credits.

310 Approaches to Social Research
Techniques for basic and applied social research. Research skills will be developed with the complementary use of informant interviews, observations, surveys, and documents in addressing theoretical issues in the social sciences and practical applications in fields such as social work, healthcare delivery, law, and business. Prerequisite: 100 or permission, and 200. One semester, 4 credits.

310L Approaches to Social Research Lab

## 311 Field Research: Crossing Cultural Boundaries

(Same as ANTH 311) One semester or January, $3-4$ credits.

## 314 Statistics

(Same as PSYC 314) One semester, 4 credits. Pre-req: Passing Math qualifying exam and sophomore standing.

## 314L Statistics-SPSS

## 320 Social Psychology

(Same as PSYC 352) One semester, 3 credits.

## 326 Diverse Identities

Prerequisite: PSYC 100 or SOC 100 or junior standing. (Same as PSY 354) One semester. 3 credits.

## 328 Human Behavior in the Social Environment

(Same as SOWK 373), 3 credits.

## 343 Sociology of Health and Medicine

Theory and research on the organization, politics, and inequities of health and medicine in the United States and around the world; lived experiences of patients and professionals; and health disparities. One semester, 3 credits.

## 345 Social Planning and Evaluation

Planning of urban physical and social organization; designing organizations and social programs; and evaluating organizational and program effectiveness. Special attention will be given to the relation between the technical and political aspects of planning decisions. Pre-requisite: 100 or instructor permission. One semester, 3 credits.

## 346 Social Power and Social Control

This course explores how social theorists understand the forms and exercise of power. It will draw on Marxian, Weberian, and Foucauldian analyses of power, as well as theories of race, gender, and sexuality in order to offer both complementary and competing understandings of power. Prerequisite: 100 or instructor permission. Recommended: 302. One semester, 3 credits.

## 348 Production, Culture \& Society

This course approaches food-something Americans often take for granted-as a complex social system. We will investigate the social relationships and modes of organization that constitute the economic, political, environmental and social contexts for the development, production, distribution, promotion and consumption of food in contemporary society. Thus the course engages topics such as genetically modified food, the politics of food regulation, industrial agriculture, alternative agriculture and /or sustainable development. One semester, 3 credits.

## 354 Political Sociology

This course is a study of power in the institutions of society, focusing on the state, groups that compete for control of the state, ideologies of state legitimacy, and the relationship of the state and capital. We will also look at how and why states and policies change over time. We will necessarily examine the ways in which race and ethnicity shape and are shaped by their interaction with the state. Prerequisite: 100 or instructor permission. One semester, 3 credits.

## 355 Migration and Immigrant Communities

Social, economic, and political analyses of migrants and immigrant communities. Will study motives and experiences of migrants, effects on migrant sending and migrant receiving countries, assimilation, transnationalism, and muticulturalism. One semester, 3 credits.

## 357 Sociology of Development

Considers development issues related to economics, politics, inequality, human rights, gender, and environment and examines modernization, dependency, and world-system approaches to the theoretical understanding these issues. Pre-requisite: 100 or instructor permission. Cross-listed with INTD 221. One semester, 4 credits.

## 358 Population Problems and Policy

This course provides an opportunity to develop quantitative skills in the analysis of population processes and in the formulation of policies attempting to intervene in these processes or to take them into consideration within other public and private sector policy arenas. The course will be of particular relevance to those interested in actuarial science, in environmental sustainability, in social policy, and in urban and other governmental and service planning processes. We examine the necessity, techniques, and precariousness of demographic projections in such areas. The course will assume prior completion of the Quantitative Reasoning ( QR ) and Introductory Laboratory Science (ILS) requirements, or their equivalence for WSP and transfer students. Crosslisted with INTD 216. One semester, 4 credits.

## 375 Modern Society

This course examines forms of social structure, culture, and interaction associated with highly industrialized societies. The course uses the nature/culture binary to organize an examination of the social, economic, political, and ecological transformations associated with modernity. Prerequisite: 100 or instructor permission. One semester, 3 credits.

## 377 Comparative Urban Development

A comparative examination of urbanization in varying historical and geographical settings and in the light of major theories of urban growth, organization, and community. Prerequisite: 100 or instructor permission. 3 credits.

## 378 Professions, Work and Careers

The organization of work settings, occupations, professions, and careers in the contemporary United States, examined in historical and comparative context. Particular attention is paid to the dynamics of gender and race and to interplay of organizational form, productivity, and the lives of individuals. Pre-requisite: 100 or instructor permission. One semester, 3 credits.

## 381 Social Class and Inequality

Students will apply contrasting theories concerning who gets what and why, in order to compare social class formations in the contemporary United States with those in other settings. Prerequisite: 100 or instructor permission. One semester, 3 credits.

## 385 Sociology of Gender

This course explores the social construction of gender. It examines the production of gender as identity, as social structure, and as complex relations of power. Prerequisite: 100 or instructor permission. One semester, 3 credits.

## 386 Racial and Ethnic Relations

An examination of central theories and concepts in the field. Specific attention will be paid to topics such as the historical emergence of minorities, ethnic solidarity, and racism. Contemporary trends in the dynamics of intergroup relations in southern California, the United States and abroad will be considered. Prerequisite: 100 or instructor permission. One semester, 3 credits.

## 406 Feminist Social Theory

Examines the perspective and contribution of feminist theory: particularly the intellectual and social circumstances of their production, their analytic strengths and weaknesses and the political ramifications of their analyses. Introduces a variety of intellectual traditions within feminism, including liberal, Marxist, radical, socialist, psychoanalytic, post colonial, and post-structuralist. Permission. One semester, 3 credits.

## 407 Senior Project Workshop

This course is offered in the fall for senior sociology majors only. The course supports students working on their senior projects by providing a designated time and place each week to discuss their research proposals with peers and professors in the department. This course is required and is a prerequisite for SOC 408 , Senior Seminar. One semester, 0 credits.

## 408 Senior Integrative Seminar

A capstone writing intensive course exploring application of sociological knowledge and skills to the production of public scholarship. Prerequisite: Senior status Sociology major or permission. One semester, 3 credits.

## 412 Preceptorship

A one semester course designed to engage students in the theory and practice of teaching sociology. This course is appropriate for students intending to teach secondary school or enter a graduate program in sociology. Students participating in the preceptorship will work closely with the faculty teaching introductory courses. By permission only, variable credit.

$\Delta$nthropology asks the question, "What does it mean to be human?" Anthropologists seek the answers to that question by integrating varied sources of knowledge: How is being human affected by the dynamics between culture, the environment, and biology? What can we learn about the total repertoire of being human by looking at societies very different from middleclass American society? How are we to understand the evolution of our uniquely biocultural species? What do archaeological sites reveal about past human societies? How can the reflexive nature of anthropology better prepare us for living in today's diverse and globalized world? The study of anthropology prepares students to 1) better understand themselves in their own sociocultural context, 2) better understand and communicate across cultural boundaries, 3) prepare for careers involving social interaction and policy; for example, academic and applied anthropology, business, education, environmental protection, government, health, law, religion, social work, etc., and 4) prepare for graduate work in anthropology, business, foreign area studies, law, other social sciences and related fields.

## GUIDELINES FOR A MAJOR THAT INCLUDES COURSES IN ANTHROPOLOGY

Two alternatives are available in Anthropology: (1) an intra-departmental Anthropology/Sociology major, and (2) interdisciplinary majors in cross-cultural studies such as in Global and Cultural Studies (see Catalog description of the Global and Cultural Studies Major).

## GUIDELINES FOR THE INTRA-DEPARTMENTAL ANTHROPOLOGY/ SOCIOLOGY MAJOR

A minimum of 36 credits, including:
Introduction to Sociology, SOC 100, 3 credits
Race, Class and Gender, SOC 200, 3 credits
Biological Anthropology, ANTH 200, 3 credits
Cultural Anthropology, ANTH 210, 3 credits
Sociological Theory, SOC 302, 3 credits
Religion, Magic and Witchcraft, ANTH 350 OR Theory in Anthropology, ANTH 310, 3 credits
Field Research: Crossing Cultural Boundaries, ANTH 311, 3 or 4 credits
Senior Integrative Seminar, SOC 408, 3 credits
One regionally-focused course on Peoples and Cultures or Archaeology, from among: ANTH 205, ANTH 211, ANTH 212, ANTH 213, or ANTH 214, 3 credits
Two of the following upper division Anthropology topics courses ( 6 credits), from among:
ANTH307, ANTH310, ANTH 321, ANTH 323, ANTH 327, ANTH 342, ANTH 350, or ANTH 374, 3 credits
One upper division Sociology course in Race, Class and Gender OR Institutions, from among:

SOC 350 , SOC 352 , SOC 354 , SOC 356 , SOC 357 , SOC 358 , SOC 378 , SOC 383 , SOC 385, or SOC 386, 3 credits

## GUIDELINES FOR AN INTRA-DEPARTMENTAL MINOR IN ANTHROPOLOGY

A minimum of 21 credits, including:
Biological Anthropology, ANTH 200, 3 credits
Cultural Anthropology, ANTH 210, 3 credits
Religion, Magic and Witchcraft, ANTH 350 OR Theory in Anthropology, ANTH 310, 3 credits
Field Research: Crossing Cultural Boundaries, ANTH 311, 3 or 4 credits
One regionally-focused course on Peoples and Cultures or Archaeology, from among:
ANTH 205, ANTH 211, ANTH 212, ANTH 213, or ANTH 214, 3 credits
One of the following upper division Anthropology topics courses, from among:
ANTH307, ANTH310, ANTH 321, ANTH 323, ANTH 327, ANTH 342,
ANTH 350, or ANTH 374, 3 credits
One upper division Sociology elective (SOC 300 and above), 3 credits

## COURSE DESCRIPTIONS (ANTH)

## 17 Internship in Anthropology

Supervised field experience in a variety of work and organizational settings. May be repeated for credit. Permission. One semester, 1-2 credits

## 200 Biological Anthropology

This course studies the physical aspects of human populations and the evolutionary history of our species. This history is studied through an overview of genetics and evolutionary theory, the fossil record, our close primate relatives and variation among contemporary humans, which underlies observable changes as our species continues to evolve. One semester, 3 credits.

## 205 Archaeological Anthropology

This course offers a general introduction to the methods, theories and achievements of archaeology, the study of the human material past. The course is designed for freshmen and sophomores who are interested in learning how archaeology is practiced and how it contributes to our understanding of past and present human life, using case studies from various regions. One semester, 3 credits.

## 210 Cultural Anthropology

Detailed studies of several societies that are geographically and culturally distant from mainstream American society. The course focuses on issues of ecology, political economy, and social and cultural change as they influence the diverse behaviors and traditions
of selected peoples. Several regions are studied in the context of their global and internal similarities and differences, as well as their cross-cultural and internal dynamics. One semester, 3 credits.

## 211* Peoples and Cultures of Asia

This course offers students a comparative study of the diverse cultures of Asia. The course implements anthropological concepts to examine the internal and cross-cultural mechanisms shaping and reshaping the region. The impact of social and cultural change resulting from shifting local, national, and global dynamics will be examined through detailed ethnographic studies of specific cultures and societies within East, South, and Southeast Asia. One semester, 3 credits.

## 212 Peoples and Cultures of Africa

This course is designed to give students an understanding of the diverse cultures of sub-Saharan Africa. An examination of the fundamental patterns of traditional African cultures will be used to understand current events in Africa. Illustrates how the daily lives of the majority of African people are influenced by tenacious indigenous institutions. One semester, 3 credits.

## 213 Peoples and Cultures of Native America

 Who are the people native to North America? What has been the role of Native Americans in the formation of "America"? What is unique to their circumstances within a complex state structure and global system? Where do various Native American groups share cultural patternsand where are their differences among them, for example, in origin, environmental setting, world view, family structure, and political system? How do these patterns influence their responses to contemporary issues? This course will explore the issues raised by such questions through detailed historical and ethnographic studies of selected societies. One semester or January, 3 credits.

## 214 Peoples and Cultures of Latin America

The term "Latin America" covers a wide range of cultures and peoples: from the Caribbean Islands to Mexico, from Central America to South America, from the Amazon to the Andes. Latin America, therefore, is a world of great contrasts-contrasts between megacities and rural hinterlands, between the wealthy and the impoverished, between industrialized zones and areas of rudimentary subsistence production, and between images of a peaceful paradise and those of extreme violence and terror. This course will examine the construction of various cultural identities in this diverse region and introduce students to the key issues confronting Latin Americans today as they are revealed in selected ethnographic studies. One semester, 3 credits.

## 307* Myth, Symbol and Meaning

Focuses on selected myths, symbols, and systems of meaning to understand the ways in which humans create meaning and communicate ideas. Sophomore standing or above. One semester, 3 credits.

## 310 Theory in Anthropology

This course will familiarize students with the range of historical and current theoretical frameworks, orientations, and research philosophies in anthropology. A thorough and critical examination of the relevant literature will serve to introduce students to major anthropological concepts, traditions and debates, from the development of anthropology as a distinct discipline in the nineteenth century, to the pressing problems and issues facing specific anthropological subfields today. Prerequisite: Anthropology 200 or Anthropology 210. One semester. 3 credits.

## 311 Field Research: Crossing Cultural Boundaries

Introduction to ethnographic field research as a general tool for understanding and communicating with people, especially those
whose culture is different from one's own. Teaches the perspectives, aims, and skills of field research through the use of (1) films and written materials that describe field research experiences and which record the results of such research, and (2) a series of fieldwork exercises. Focus is on the nature and meaning of cultural diversity and its implications for cross-cultural communication. One semester or January, 3 or 4 credits.

## 321 Expressive Arts of Africa

Explores the symbolic and aesthetic representations, implicitly understood and explicitly expressed by selected African peoples in cultural communication. The concepts discussed will center around the relationship between art, ritual and symbols in cultural expression. The focus is the expressive cultures of sub-Saharan Africa as communicated mainly in the sculpture of the region. The aim is to read culture through art and to understand how Africa's visual arts constitute the cultural encyclopedia of specific African groups. One semester. 3 credits.

## 323* Environmental Anthropology

The changes that humans make in the natural environment are related to their worldviews and to their ideas about what the relationship between humans and nature should be. This course will explore these relationships cross-culturally through the readings of ethnographies and the viewing of films. Sophomore standing or above or instructor's permission. One semester, 3 credits, or January, 4 credits.

## 327 Male and Female: The Anthropological Perspective

This course will familiarize students with the cultural and analytical categories of sex and gender and the way anthropologists have approached research on sex and gender in a number of ethnographic contexts. Students will explore how sex, gender and sexuality, rather than being natural or biological inevitabilities, are culturally and historically contingent identities. Sophomore standing and above. One semester. 3 credits.

342 Sound and the Religious Experience (same as REL 342) One semester, 3 credits.

## 350 Religion, Magic, and Witchcraft

 Focuses on understanding how the religious, magical, and witchcraft practices found in diverse cultures relate to an overall attempt to explain the world beyond ordinary human understanding and to the pattern of social, psychological, or ecological needs of a society. We are not concerned with the competing notions of God and gods that are part of various traditional religions, rather we aim to understand the cultural circumstances that foster certain religious beliefs and practices, the use of magical rituals in confronting social problems, and the role of witchcraft in shaping the behaviors and responses of people within cultural groups.. One semester. 3 credits.374 The Cultural Contexts of Childhood Childhood in a variety of cultures, primarily focusing on societies in Africa, Asia, Latin America, and Oceania. How does the child become a full member of a particular society
and what are the sociocultural contexts that influence that process? Examines methods of studying childhood cross-culturally. Sophomore standing or above. One semester, 3 credits.

## 417 Internship in Anthropology

Supervised field experience in a variety of work and organizational settings. May be repeated for credit. One semester, 1 or 2 credits. Permission

190, 290, 390, 490* Selected Topics in Anthropology
Permission. Variable credits.
295, 395, 495 Independent Studies in Anthropology
Permission. Variable credits. May be repeated for credit.
*Not offered every year.

OsLocial Work is a profession committed to the enhancement of social and human well-being, the alleviation of poverty and oppression, and the promotion of social and economic justice for all. The profession practices in a wide variety of local, national, and global settings including family services, child welfare, corrections, probation, behavioral health and medical centers, drug and alcohol treatment, community organizations, and social policy arenas. With awareness of the major social and technological changes taking place in our world, the Whittier College Social Work program prepares students for entrylevel positions in generalist social work practice where they can effectively address the variety of human welfare needs prevalent in a global society.
The undergraduate program in Social Work is accredited by the Council on Social Work Education. It provides a professional foundation curriculum that contains the common body of knowledge, values, and skills of the profession. The Program specifies a common base of liberal arts courses to be taken prior to enrollment in the core foundation courses. The foundation courses are sequenced over three years; the program culminates in the senior year with an intensive, professionally supervised field practicum, and an integrative seminar that seeks to assess a student's learning outcomes in the liberal arts and social work curriculum. Selected courses are also of interest to students in psychology, sociology, anthropology, history, economics, child development, pre-medicine, pre-physical therapy, business administration, and education. Students are urged to consult Social Work Program advisors in the Department of Sociology, Anthropology and Social Work for information and guidance.

## GUIDELINES FOR A MAJOR IN SOCIAL WORK

Students can begin taking the professional foundation courses required for the major in their sophomore year. Before starting foundation courses, students are advised to take PSYC 100, SOC 100, ECON 200, and ANTH 210 or other related courses (ANTH 211-214.), a total of 12 credits.

A total of 43 credits of Social Work is required, including:
SOWK 240: Introduction to Social Work, 3 credits
SOWK 340: Social Work Practice I: Working with Individuals, 3 credits
SOWK 343: Social Work Practice II: Working with Families and Groups, 3 units
SOWK 363: Social Work Practice III: Working with Communities and Organizations, 3 credits
SOWK 310: Approaches to Social Research, 4 credits
SOWK 364: Social Welfare Policy, 3 credits
SOWK 373: Human Behavior in the Social Environment, 3 credits
SOWK 408: Integrative Seminar, 3 credits
SOWK 412: Social Work Practicum and Seminar I, 4 credits
SOWK 413: Social Work Practicum and Seminar II, 3 credits
SOWK 414: Social Work Practicum and Seminar III, 4 credits

Also required:
SOC 314: Statistics, 4 credits
PSY 222: Biological Bases of Behavior, 3 credits
Recommended for Social Work majors:
SOWK 100: Issues in Human Services
SOWK 386: Welfare of Children
SOWK 270: Death, Dying and Bereavement
PSYC 372: Abnormal Psychology
SOC 389: Sociology of Gender
SOC 358: Population Problems and Policy
SOC 260: Social Movements
HIST 207: United States since 1865

## GUIDELINES FOR A MINOR IN SOCIAL WORK

The minor in Social Work is designed to prepare students for active and informed participation in our society, where social welfare plays a major role. A minimum of

15 credits is required, including 100 , 240 , and 364 ; and 6 credits selected from SOWK 340, 343, and 363.

## COURSE DESCRIPTIONS (SOWK)

## 100 Issues in the Human Services

An introduction to selected issues in social work issues and generalist practice, including practice with children and families. Values, belief systems, legal and ethical issues inherent in working with diverse client populations are examined and critically analyzed. January Term, 4 credits.

## 240 Introduction to Social Work

Presents an overview of 1 ) the profession of social work and its history in the United States; 2) social work values, ethics, and principles; 3) the generalist social work practice model across a variety of settings and with a diversity of clients; and 4) the process of empowerment and power analysis in working for a socially and economically just society. Includes selfassessment of aptitude for social work. Two semesters, 3 credits.

## 270 Death, Dying and Bereavement

Explores historical and cultural variations in attitudes and practices surrounding death, dying and bereavement. We examine major causes of death across age and other social groups, social inequality related to death and dying, individual and social practices of grieving, and the ethics of dying in an age of
technology. We study death-related issues both at the level of social organization and in terms of how they affect people at varying stages of the life course. (Cross-listed with SOC 270) Permission. January session, 4 credits.

310 Approaches to Social Research Techniques for basic and applied social research. Research skills will be developed in the complementary use of informant interviews, observations, surveys, and documents in addressing theoretical issues in the social sciences and practical applications in fields such as social work, healthcare delivery, law, and business. Prerequisite: SOC 100 or permission. (Cross-listed as SOC 310) One semester, 4 credits.

## 340 Social Work Practice I: Working with Individuals

This course is designed to provide a foundation in social work practice theory. Because generalist social work practitioners need to respond to a wide variety of problem situations, students will learn to apply the generalist practice model within an eco- systems framework. Emphasis is given to learning micro-level relationship and evidence-based interviewing skills necessary for culturally competent practice with individuals and families. Social work ethics, values, practice evaluation, and working with populations at risk are major dimensions of the course. Prerequisite: 240 . One semester, 3 credits.

## 343 Social Work Practice II: Working with Families and Groups

This course examines generalist practice with families and groups, while acknowledging personal and client strengths, capacities and resources. Students learn to apply the generalist practice model to families and groups, including task groups and intervention groups, examine empirically based interventions, and evaluate the effectiveness of their own ethical and culturally competent interventions. Prerequisite: 240. One semester, 3 credits.

## 363 Social Work Practice III: Working with Communities and Organizations

This course explores generalist social work practice with communities and organizations and introduces practical approaches to taking action. The course examines issues of influence and power in the urban community and the role of political, economic, social, and religious organizations in limiting and/ or enhancing individual and group well-being and freedom. Students are introduced to the theoretical and practical knowledge, skills, and values required for macro social work practice (community organizing, planning, policy, and administration). Prerequisite: 240. One semester, 3 credits.

## 364 Social Welfare Policy and Services

Students examine the history of social work, the history and current structure of social services, and the role that social policy plays in service delivery. Students learn to analyze social policies that effect local, national, and global social welfare issues and research that relates to competent social service delivery. The course also focuses on strategies that advocate for policy consistent with social work values and skills and that prepare students to work within economic, political, and organizational systems. Prerequisite: ECON 200. One semester, 3 credits.

## 373 Human Behavior and the Social Environment

This course examines the reciprocal relationships between human behavior and social environments. Students analyze theories and other sources of knowledge that address the interactions between and among individuals, groups, organizations, communities, and economic systems that enhance or deter human well-being. This includes theories of biological, cultural, psychological, and spiritual development throughout the human life span. Co-Requisite: PSYC222. One semester. 3 credits.

## 385* Child Abuse and Domestic Violence

Examines multi-dimensional explanations and laws pertaining to sexual and physical child maltreatment and familial violence. Students will explore selected issues related to these psychosocial problems, examine related social policies, explore empirically based culturallycompetent interventions. January or Summer, 4 credits.

## 386 The Welfare of Children

Students enrolled in this course will explore the diverse needs and issues related to child welfare systems of care. The course provides an overview of relevant knowledge, theories, values, skills, and social policies related to competently working with children and their families. One semester, 3 credits.

## 408 Integrative Seminar

Students will assess their attainment of the Social Work Program Objectives, which are derived from the CSWE Educational Policy and Accreditation Standards. Students will also examine and define the contributions that the liberal education curriculum, co-curricular activities and other life experiences have enhanced their development as a social work major. This analysis is presented in the format of an Integrative Portfolio, and includes a paper in the major to be presented to social work colleagues and professionals. Senior standing. Only for social work majors. Satisfies COM 4 requirement, Senior Presentation. Permission. One semester, 3 credits.

## The Social Work Practicum and Seminar

The sequence $(412,413$, and 414$)$ provide students in the major with a year long internship (a minimum of 400 hours during the academic year), approximately two full days, 16 hours a week) in a social service organizational setting under joint College and agency planning and supervision.

412 Social Work Practicum and Seminar I The practicum and required seminar (2 or 2.5 hours per week) is designed to help students apply and integrate the knowledge, values and skills necessary for beginning professional practice and evaluate their own practice and professional development. Senior Standing. Only for social work majors. Permission. Prerequisite: 240. Fall semester, 4 credits.

413 Social Work Practicum and Seminar II Advanced level internships in community agencies (usually a continuation at the same placement agency as 412). Structured learning opportunities that enable students to compare and evaluate practice experiences, integrate classroom knowledge, and engage in self-assessment of their own professional development. Two full days (16 hours per week) and required seminar, 2 hours per week. Senior Standing. Only for social work majors. Permission. Prerequisite: 412. January, 3 credits.

414 Social Work Practicum and Seminar III
Continuation of 412 and 413. Practicum, two full days ( 16 hours per week) and required seminar, 2 or 2.5 hours per week. Senior Standing. Only for social work majors. Permission. Prerequisite: 413. Spring, 4 credits.

190, 290, 390, 490* Selected Topics in Social Work
Variable credits. Permission. May be repeated for credit.

295, 395, 495 Independent Studies in Social Work
Variable credits. Permission. May be repeated for credit.
*Not offered every year.

# THEATRE AND COMMUNICATIONS ARTS 

John Bak

Rich Cheatham

Gil Gonzalez
Jennifer Holmes, Chair
Katie Liddicoat
Brian Reed

TeTheatre and Communication Arts Department offers courses serving students in the areas of performance, directing, theatre history and dramatic literature, and stage design and technology. The department also offers courses in speech communication, film history and criticism, and video production (see Film Studies minor). Students who are interested in Theatre and Communication Arts should consult an appropriate faculty member for advice. The Theatre Arts program at Whittier College is firmly based in the liberal arts tradition. Students majoring within the department follow a program of study designed to stimulate awareness of our cultural traditions and to explore the creative abilities of each individual. This program provides pre-professional training for those who plan to seek a career in the performing arts, to prepare for graduate school, or to pursue careers in other allied fields including teaching. Recent graduates have found that their education in the department has helped to prepare them for careers in personnel, education, sales and advertising, business, law, and publishing, as well as acting, directing, design and technical direction, writing, film, television, and the themed entertainment industry.

## GUIDELINES FOR A MAJOR IN THEATRE AND COMMUNICATION ARTS

Total Requirements: 31-34 credits
Department Core Requirements for all majors (25-28 credits):
Theatre Practicum, THEA 50, 1 credit per year of residence.
Introduction to Acting, THEA 110, 3 credits
Introduction to Design and Technology, THEA 240, 3 credits
Play Analysis \& Criticism, THEA 272, 3 credits
Shakespeare, THEA 328, 3 credits
Scenic Design, THEA 340, or
Stage Lighting, THEA 345, or
Costume Design, THEA 347, 3 credits
World Theatre, THEA 372 (A and B), 6 credits
Senior Project, THEA 485, 3 credits
Additional Requirements:
Theatre Arts—Performance Emphasis, 6 credits:
Fundamentals of Stage Directing, THEA 315, 3 credits.

Voice and Movement I, THEA 220, or<br>Voice and Movement II, THEA 225, or<br>Scene \& Monologue Study, THEA 210, or<br>Performing Non-Fiction, THEA 392, 3 credits.<br>or<br>Theatre Arts—Design/Technology Emphasis, 6 credits:<br>Two additional courses from:<br>Drawing and Drafting for the Theatre, THEA 245;<br>Painting for the Theatre, THEA 246;<br>Scenic Design, THEA 340;<br>Stage Lighting, THEA 345;<br>Costume Design, THEA 347

## GUIDELINES FOR A MINOR IN THEATRE AND COMMUNICATION ARTS

A minor requires 20 credits, including THEA 50, 2 credits; THEA 110, 3 credits; THEA 240, 3 credits; THEA 272, 3 credits; and nine credits in courses numbered 300 and above.

## COURSE DESCRIPTIONS (THEA)

## 004* Pilates

Based on the work of Joseph Pilates, this course focuses on body awareness through a series of specific exercises that simultaneously strengthen and stretch the body. The Pilates Method encourages a mind and body partnership, establishing inner balance, physical economy and grace. Previous exposure to Pilates is not necessary. May be repeated for credit. One semester, 1 credit. (Same as KLS 004)

## 005* Yoga

Drawing from various Yoga practices this beginning to intermediate yoga course focusing on harmonizing mind, body, and spirit while strengthening, and lengthening muscles and muscle groups. Various breathing techniques and physical postures will be practiced, as well as relaxation and meditation exercises. Previous exposure to Yoga is not necessary. May be repeated for credit. One semester, 1 credit. (Same as KLS 005)

## 50 Theatre Practicum

Participation in two major productions, either as an actor or as a member of the stage crew. Actors must audition and are cast by the director of each production. Possible stage crew assignments include scenery construction and painting, properties preparation, stage lighting preparation, costume construction, sound recording, and serving on backstage crews
during rehearsals and performances. Enrolled students should contact the instructor at the very beginning of the semester to arrange their production assignments. May be repeated up to 5 credits. One semester, 1 credit.

## 70* Actor's Lab

An actor and director workshop. Student actors rehearse and perform scenes in conjunction with THEA 315 \& THEA 415 student directors. Prerequisite: none. One semester, $0-2$ credits. May be repeated for additional credit.

## 101 Essentials of Public Speaking

Theory and practice of the fundamental principles of public speaking. Empowers speakers with positive preparation techniques. Focuses on speaker confidence, body language, breathing, clarity of message and connection with audience during delivery. One semester, 3 credits.

## 110 Introduction to Acting

Impulse to action-introduces the student to ideas on/about performance. This introductory course focuses on fundamental stage techniques for the actor: stage geography, body positions, motivated action, timing, stage business, analysis of the script/role, and conditioning. Principles from the teachings of Spolin, Stanislavski, Laban, Bogart, Benedetti, and more will be used for both scene and monologue study. Prerequisite: none. One semester, 3 credits.

## 210* Scene \& Monologue Study

Advanced scene and monologue study exploring movement, improvisation, and techniques of building a character. Includes Shakespeare and contemporary play analyses, laboratory performances, and physical exercises geared to connect the actor to the text. Prerequisite: THEA 110 and permission of instructor. One semester, 3 credits.

## 220* Voice and Movement I

Drawing on various developmental techniques, including Linklater, Berry, Spolin, and Feldenkrais, this course utilizes the classroom as a laboratory exploring voice and movement for the stage. One semester, 3 credits.

## 225* Advanced Voice and Movement II

Building on foundational work explored in Voice and Movement, this course incorporates improvisation and characterization, culminating in a final performance. One semester, 3 credits.

## 240 Introduction to Design and Technology

An introduction to design and technology for the theatre arts. Most of the course focuses on three design specialties: scenery, lighting, and costumes for theatre, with some additional attention given to design for film and television. Concurrent enrollment is required in Theatre 240L, the laboratory component of this course, which will be arranged by the instructor on an individual student basis (usually 2 hours per week). Through the laboratory component, students will participate in the construction of scenery and properties for two productions during the semester. One semester, 3 credits.

## 245* Drawing and Drafting for the Theatre

A thorough introduction to drawing and drafting techniques for design and technical production in the theatre, including some use of computer-aided design (CAD). May include a laboratory component for major productions. One semester, 3 credits.

## 246* Painting for the Theatre

An introduction to the study and practice of both scene painting for the theatre and the use of water-based painting media in creating scenic and costume design renderings and scene painter's elevations. The course may include a laboratory component for major productions. Laboratory fee. One semester, 3 credits.

## 260* Chicano/Latino Theatre

Traces the contextual, thematic, and historical influences of Chicano/Latino theatre. Analysis of plays, performances, movements, and theatre troupes that express the experiences of the Chicano/Latino people. One semester, 3 credits.

## 272* Play Analysis \& Criticism

This course focuses on analysis and evaluation of plays in terms of their content, structure, and style. Emphasis on dramatic theory and the critical terms that are used to analyze particular plays and on the relationship between literary analysis and theatrical performance. One semester, 3 credits.

## 300* Paradigm Shifts in the Arts

What is the function of art in societies? How have the arts reflected, created, or predicted paradigmatic shifts in societies? This interdisciplinary course focuses on the interconnectedness of the arts and society in the past 100 years. Studying works of art that have had violent and negative reactions when first presented to the public, we will examine the deeply embedded beliefs these works of arts challenged. One semester, 3 credits.

## 310* Styles of Acting and Performance

 Focuses on a specific style or genre of acting and/or performance such as commedia dell'arte, Comedy of Manners, Farce, Epic Theatre, Realism, Greek, Pinter, Mamet, Shakespeare, Chekhov, Artaud, Grotowski, and more. Prerequisite: THEA 110 and permission of instructor. One semester, 3 credits (may be repeated for additional credit each time a new topic is illuminated).
## 315* Fundamentals of Stage Direction

 Introduces students to principles, procedures, and practice of stage direction; script selection, analysis, casting, assembly of a director's prompt book, research, and rehearsal problems and strategies. Prerequisites: THEA 110 and THEA 240, junior or senior status; instructor permission. One semester, 3 credits.
## 328 Shakespeare

(Same as ENGL 328) One semester, 3 credits.

## 330* Playwriting

General analysis of dramatic structure and of student-written scenes culminates in completion of a one-act play. One semester, 3 credits.

## 340* Scenic Design

Study and practice of scenic design techniques, including the development of visual research sources, freehand drawing and mechanical drawing exercises, and scale model construction as applied to design projects for specific plays. Some attention will be given to the basic visual elements of design, to the history of stage design, to the use of computeraided design software, and to scenic design for film and television. One semester, 3 credits.

## 345* Stage Lighting

Study of stage lighting technology and stage lighting design theory and practice. Students will develop several lighting design projects. They also will assist in the preparation of the stage lighting for one or two theatre productions during the semester. One semester, 3 credits.

## 347* Costume Design

Study and practice of costume design techniques, including the development of visual research sources, practicing freehand drawing and watercolor painting techniques, and drawing and painting of costume sketches for several plays. Some attention will be given to the basic visual elements of design, to choosing appropriate costume fabrics, and to costume history and period styles. One semester, 3 credits.

## 372A* World Theatre

Part one of a two-semester survey, integrating a multi-cultural history of world theatre, studying performance traditions and dramatic literature. The course encompasses the foundations of theatre via oral traditions and rituals, Aristotle and Greek theatre, and the early and late Renaissance periods. Emphasis on the importance of historical and literary research is key in formulating critical analysis of period and production and incorporating these insights into research papers. (Does not have to be taken in sequence.) Prerequisite: 272 or permission. One semester, 3 credits.

## 372B* World Theatre

Part two of a two-semester survey, integrating a multi-cultural history of world theatre for the past 350 years. The class traces the development of theatre from the comedy
of Molière through modern plays of Ibsen and Pirandello, to the post-modern works of contemporary avant-garde theatre.
Emphasis on the importance of historical and literary research is key in understanding the production of theatre, its impact on audience, and its production of meaning throughout the centuries. (Does not have to be taken in sequence.) Prerequisite: 272 or permission. One semester, 3 credits.

## 378* Musical Theatre Workshop

A workshop exploring the unique combination of skills necessary to work in the musical theatre. Acting, singing and movement/dance techniques will be emphasized. Workshop will culminate in a studio full-scale musical theatre production. One semester, 3 or 4 credits.

## 392* Performing Non-Fiction

This course utilizes performance as a research medium, using solo performance as a means to understand and critique historical and contemporary figures. Students study the figure of their choice, conducting research and creating an original script, which culminates in a one-person performance. Additionally, the elements of performance are examined via the creation of four short solo performance pieces, focusing on light, sound, color, and language. Solo-performances that are well researched and rehearsed will be invited to present at an open performance in the Studio Theatre at the end of the semester. Prerequisites: THEA 272 AND 110 (or 210) or 220 (or 225) OR permission of instructor. One semester, 3 credits.

## 415* Advanced Stage Direction

Continuation of THEA 315. Emphasizes working with text (plays, poetry, short stories, etc.), visual images (paintings, lithographs, sculptures, etc.), and music as a means of creating staged theatrical pieces. Culminates in the staging of a new work. Prerequisites: THEA 315 and permission of instructor. Once semester, 3 credits.

## 485 Senior Project

Arranged as a directed study, this course is the capstone experience for all Theatre and Communication Arts majors. Each student will complete a major project either in directing, acting, design, technical production, stage
management, or critical research. The project will entail both analytical and creative endeavor and will result in some kind of public presentation or performance. The students will also document their work on the projects justifying the choices and/or conclusions they made. This project is designed to satisfy the college "Paper in the Major" requirement. Prerequisite: Senior status as a Theatre and Communication Arts major. One semester, 3 credits.

190, 290, 390, 490* Selected Topics in Theatre
Topic and number of credits to be determined by the instructor. May be repeated for credit.

295, 395, 495 Independent Studies
Topic, number of credits, and times by arrangement. Permission of instructor is required. May be repeated for credit.
*Not offered every year.

## FILM STUDIES MINOR

Film Studies at Whittier College is an interdisciplinary minor administered through the Department of Theatre and Communication Arts. This minor emphasizes the analysis of film as an artistic form and a key media component in the multiple expressions of contemporary life. The minor encourages students to explore film through the lenses of form, content, and construct, emphasizing the history of narrative structures, films role as a medium of cultural expression, and the theories, methodologies and criticisms within film studies.

## GUIDELINES FOR A MINOR IN FILM STUDIES

A Film Studies minor requires a minimum of 18 credits, including the required two core courses: FILM 170 and FILM 480, three courses exploring the historical contexts of film from cultural and historic perspectives, and one course engaging film from a practical application, such as Screenwriting, Acting for the Camera, or Video Production.

## FILM 170* Fundamentals of Cinema

This course provides an introduction to the aesthetics and language of film. It also understands film as an artistic expression, an economic product, and a social text. Lectures and discussions are supplemented by class screenings. One semester, 3 credits.

## FILM 270* Film Genre

This course surveys the major films, filmmakers, themes, and issues of a major film genre. The genres will vary from semester to semester and during any given term, the genre might be the musical, gangster, western, film noir, or horror films. Lectures and discussions are supplemented by class screenings. May be repeated for credit. January, 3 or 4 credits.

## FILM 275* Film Movements

This course explores the major films, filmmakers, themes, and issues of a particular critical fashion or period in the history of cinema. During one term, the course may, for example, cover the Hollywood Renaissance, Italian Neo-Realism, or French New Wave. As in THEA 270, the subject matter will vary from term to term. Lectures and discussions are supplemented by class screenings. May be repeated for credit. January, 4 credits

## FILM 280* Narrative Cinema

A survey of the history, aesthetics, and theory of the narrative film. Lectures and discussions are supplemented by class screenings. One semester, 3 credits.

## FILM 285* Documentary Cinema

A survey of the history, aesthetics, and theory of the documentary film/video tradition. Lectures and discussions are supplemented by class screenings. One semester, 3 credits.

FILM 320* Introduction to Video Production Scripting, videography, audio, and editing are among the procedures and principles covered in the students' planning, producing, and evaluating video projects. One semester, 3 credits.

FILM 325* Documentary Video Production Video production of a documentary. Prerequisite: 320 . One semester, 3 credits

FILM 380* Screenwriting Workshop
This intensive course teaches students how to write a full-length screenplay and treats screenwriting as part of the longstanding storytelling tradition, extensively referencing contemporary screenwriting analysts. Students will formulate their individual story ideas and develop them through a complete story outline, treatment, and first draft of a fulllength feature script (from 90-129 pages long). Permission of instructor required. One semester, 3 credits.

## FILM 420* Advanced Video Production

Advanced video production techniques with emphasis upon scripting, pre-production planning, and logistical coordination. Prerequisite: 320 and permission of instructor. One semester, 3 credits.

## FILM 421* Directed Study in Video Production

For advanced students wishing to produce independent productions. Prerequisite: 320 and permission of instructor. One semester, 3 credits.

## FILM 480* Film Theory and Criticism

Provides students with an overview of major film theories and critical writings that have shaped discussion of film for the past 100 years. Frameworks examined will include those provided by auteur, psychoanalytic, post-modern, feminist, Marxist, and queer theories. Critical analysis through writing and class discussion will be a central feature of the course. Prerequisite: FILM 170 or permission of instructor. One semester, 3 credits

190, 290* Selected Topics in Film Studies Topic and number of credits to be determined by the instructor. May be repeated for credit.

295, 395, 495 Independent Studies Topic, number of credits, and times by arrangement. Permission of instructor is required. May be repeated for credit.

This is not a complete list of courses offered that will fulfill the Film Studies minor. Other courses, applicable for the Film Studies minor, will be cross-listed under various departments, and will vary from semester to semester.

Joyce P. Kaufman, Political Science, Associate Academic Dean and Director of the Whittier Scholars Program
Ria O'Foghludha, Art and Art History, Associate Director

$\tau$Whittier Scholars Program (WSP) is governed by the Whittier Scholars Council, consisting of appointed faculty members from across the College and elected student members. For a description of the Whittier Scholars Program, see the "Curriculum" section of the catalog, or contact the Whittier Scholars Program Office, located in Wardman Hall.

## COURSE DESCRIPTIONS (WSP)

## 101 The Individual, Identity and Community

The foundation course for the Scholars Program. Designed to enable students to explore issues such as: human beings in a social context; the relationship between the individual and the community; the role of education and the life of the mind; and the role of asking and understanding enduring questions and analyzing issues. Themes are addressed in terms of different historical periods, disciplines, cultures and identities. Director's permission required. 3 credits.

## 201 Designing Your Education

Educational philosophy, values clarification and goal setting, alternatives for courses of study, and preparation of an individual Educational Curriculum. Director's permission required. 1 credit.

301 Nature, Theory and Bases of Knowledge Explores various methods of gathering and understanding knowledge from a number of disciplinary perspectives. Develops awareness of what knowledge is and an understanding of the approach most appropriate for framing and completion of the Senior Project. Acceptance into the Program and Director's permission required. 3 credits.

## 399 Internship

Internship is an area directly related to the Educational Design. This is an off-campus experience under joint college/site planning and supervision. May be repeated for credit. Director's permission required. 1-4 credits.

## 401 Senior Seminar

Capstone seminar that enables students in the program to share their ideas and to peer review one another's work as they progress through the creation of a Senior Project. Design Board approval and Director's permission required. 3 credits

499 Senior Project
Design Board approval and Director's permission required. Variable credits.

# INTERNATIONAL PROGRAMS (STUDY ABROAD) 

Katie Hunter, Director

बnkeeping with Whittier College's commitment to a well-rounded liberal arts education, qualified students are encouraged to apply to study abroad for a semester in a country and academic environment that will enrich their overall college experience; contribute positively to the life of the College; and engender responsible participation in a global, multi-cultural society. Indeed, the purpose of study abroad is to immerse students in an international culture so that they may:

- become informed firsthand of the history, culture, and contemporary issues of the country
- understand the way people of the host country view the rest of the world
- gain insight into their own culture by comparing and contrasting American institutions and values with those of the host country.

Whittier offers opportunities for international study in over 25 countries at more than 70 locations in Africa, Asia, Australia, Europe, and Latin America through affiliations with a variety of programs and academic institutions. Whittier's flagship program is the Denmark International Studies Program in Copenhagen.
These study abroad programs can help students:

- meet major or minor requirements
- complete general education courses
- achieve proficiency in a second language
- take courses not available at Whittier

Programs are available for the full semester, summer, and Jan term. Course work abroad can be taken in the language of the host country or in English. There are many different options for students to personalize their international educational experience.

Typically, students participate in semester-long programs during their junior year. Advance planning and advising is necessary since the application process takes place three to six months prior to the planned term abroad. General information sessions are scheduled each semester and information is available online and in the International Programs Office throughout the year.

Gareer preparation is an important part of a Whittier education. The fields of law, education, social work, and the health services have traditionally drawn upon liberal arts graduates for advanced study in graduate schools or professional programs. Liberal arts students select an increasingly wide variety of careers in science, management, business, social service, government, religious vocations, journalism, and the fine arts.
Certain courses in the natural sciences, social sciences, and the humanities are generally required by professional schools for admission. Whittier College also offers more advanced courses that fulfill certain professional requirements. The following programs are outlined here to help students who intend to seek professional training after graduation. Students interested in professional programs should contact their faculty advisors for additional information.

## Pre-Engineering (3-2 Program)

Whittier College has established cooperative programs with engineering schools at a number of universities, allowing students to benefit from the broad intellectual training offered by a liberal arts college and the technical training offered by an engineering school. Students in the 3-2 program normally spend three years at Whittier College and two years attending an engineering school. The five-year program leads to a Bachelor of Arts degree from Whittier College and a Bachelor of Science degree in engineering from a university.
To be recommended for admission to engineering school, students must ordinarily complete 90 credits of coursework at Whittier College including the prescribed sequence with at least a 3.0 overall GPA, a minimum grade of " $C$ " in each of the 3-2 program core courses, and a 3.0 GPA in the core courses. Students recommended by their advisor and the 3-2 director will normally be admitted to at least one of the cooperating universities. The B.A. from Whittier College will be awarded only after a student has successfully completed all of the graduation requirements at both schools.
Guidelines for the program, a list of participating Engineering Schools, and other information can be obtained from the Coordinator of the 3-2 Program, Dr. Seamus Lagan, or from our web page at www.whittier.edu/Academics/3-2EngineeringProgram/

## Pre-Health Sciences other than Pre-Physical Therapy

Whittier provides excellent preparation in the basic fields required for admission to accredited professional schools. There is a Health Science Advisory Committee of faculty members which works closely with each student. Students should plan to complete a Bachelor's degree in a specific major before applying to the school. Although it is possible to enter some schools upon completion of 90 semester credits, most beginning health science students have completed four years of undergraduate work. It is important that each student determines the specific courses required for the schools to which application is made. Certain minimum requirements are common to most medical, dental, optometry, chiropractic and veterinary schools. These include one year of each of the following:
biology, inorganic chemistry, organic chemistry, physics and English. Strongly recommended courses include: math (often through calculus), additional biology (i.e. Genetics, embryology), social and behavioral sciences, and biochemistry. Other recommended courses are: anatomy, physiology, microbiology, and quantitative analysis.
Students intending to pursue a health science program should contact an advisor in the Biology or Chemistry Departments immediately after admission to Whittier College to plan their curricula and to determine the specific requirements of the schools they are considering. In addition, participation in the Whittier College Health Professions Shadowing program is encouraged.

## Pre-Legal

Courses in the following fields are recommended for those preparing to enter law school: business administration, economics, English, history, philosophy, political science, psychology, and sociology. Pre-legal students may take a major in any department or area of their choice. Such students are urged to consult the College's pre-law advisors for more detailed guidance.

## Pre-Therapy

Early consultation with appropriate faculty is important for a smooth progression through undergraduate requirements and application to appropriate graduate programs.
Occupational Therapy: A major in psychology, music or art is recommended.
Physical Therapy: A major in biology or kinesiology and leisure science
(see kinesiology and leisure science major, pre physical therapy emphasis) is recommended. Common prerequisites for application to physical therapy programs include: general biology, one year anatomy/physiology, one year general chemistry, one year physics, three semesters psychology, and one semester statistics (math, psychology, or kinesiology and leisure science). Recommended courses: biomechanics, exercise physiology, movement anatomy, motor control, ethics, human development.
Recreation Therapy: A major in kinesiology and leisure science with the Sport and Recreation Management emphasis is recommended for those who may want to obtain their recreational therapy certificate (see kinesiology and leisure science major, recreation courses).

## Social Work

The Social Work Program has a unique role in the undergraduate curriculum of Whittier College. Its mission is consistent with the historical Quaker values of service, concern for the well being of individuals, and respect for diversity in a global society, and the attainment of social and economic justice for all. The Social Work Program is accredited by the Council on Social Work Education (CSWE).
The Program offers an excellent education for undergraduates with career interests in social services, especially social work practice. Students gain knowledge, values, and skills to work with numerous interacting systems: the individual, the
family, the neighborhood and larger community, and a variety of social welfare organizations and social institutions.

The objective of the program is to prepare students for beginning generalist social work practice and for graduate social work education. Social work majors are required to take 15 units of specified liberal arts courses and 43 units of social work core courses. The core includes 400 hours of field experience in social agencies that provide supervised practice experience appropriate to the students' level of development. Student may also complete a minor in social work (18 credits).

Students are urged to consult the Social Work Program advisors in the Department of Sociology, Anthropology and Social Work for more information.

## Teacher Education

Whittier College has a long and proud tradition in the preparation of elementary and secondary teachers. Although a major in education is not allowed by the State of California, Whittier College is authorized by the State Board of Education and the Commission on Teacher Credentialing to offer courses of study leading to the Multiple Subject (elementary) credential, and the Single Subject (secondary) teaching credential.

Multiple Subject credential candidates may complete an elementary subject matter program that provides academic preparation in all the content areas generally taught in the elementary school. The subject matter competency program is closely aligned with Whittier College's Liberal Education Program, enabling students to work simultaneously toward a credential and completion of Liberal Education requirements. Currently, multiple subject teacher candidates are required to pass the CSET (California Subject Examinations for Teachers) to document subject matter expertise. A minor in Elementary Education is also available.
Single Subject credential candidates at Whittier may earn teaching authorization in such areas as English, history, mathematics, physical education, as well as others. Contact the Department of Education and Child Development to obtain a current list of approved subject matter teaching authorizations.

Teacher credentialing programs in California generally require five years of college study. With guidance from academic (major) and Department of Education and Child Development advisors, students complete preliminary credential programs in four-and-one half years.

## Urban Studies

There is a substantial interest in urban studies among both students and faculty on campus. A student can arrange a pre-professional curriculum in urban studies designed as preparation for graduate work in such fields as urban planning, design, architecture, public administration, or social service delivery. Such a curriculum can be constructed around either the Liberal Education Program or the Whittier Scholars Program. The latter option permits a self-designed interdisciplinary major; both options allow a disciplinary concentration complemented by relevant courses from other disciplines forming the core of the program. A student interested in urban planning might major in sociology, political science, or economics, focusing
on the relevant urban and planning courses both within the major and in related fields. Someone more interested in design or architecture might major in art or physics and supplement this work with relevant study in other departments. Such flexibility allows for the diversity of career opportunities growing out of urban studies. The faculty advisory committee members are available to help students design a program suited to particular areas of interest and career objectives.

## Continuing Professional Education Program (CPEU)

Whittier College offers a variety of educational opportunities for educators and administrators through its Continuing Professional Education Unit (CPEU) Program. CPEU courses are NOT applicable to any Whittier College degree or credential. They may be submitted to school districts, early childhood programs, and social service agencies for salary enhancement, if applicable.
CPEU courses are clearly distinguished from academic credits by course number. Since the CPEU program is designed for active professionals, the Whittier College instructor is responsible for documenting participation, but not for assessing learning outcomes, progress, or performance.
Information on the CPEU program is available through the Office of Graduate and Teacher Education.

## 3/3 Baccalaureate/Juris Doctorate Program at Whittier College

This accelerated program identifies prospective and current students who, based upon their performance as undergraduates at Whittier College, are eligible for early admission into the Whittier Law School. A bachelors degree will be awarded upon the satisfactory completion of thirty (30) transferable units of work at Whittier Law School.
Any student may enter into the program at any time during their matriculation. If at the end of three years at Whittier College the student has achieved at least a 3.0 G.P.A. and is in the upper $50 \%$ of those who take the L.S.A.T., that student will be eligible for admission to Whittier Law School. The student will be admitted if the student otherwise meets the criteria of admissions to Whittier Law School. The student must, by the end of three years at Whittier College, have completed all of the liberal education requirements and all of the required courses in their chosen major before they take their first year at the Whittier Law School. In addition, they must have completed 90 units.

Fritz Smith, Mathematics, Associate Dean of Faculty and Coordinator of the Summer Program

TWhittier College Summer Program consists of three sessions with the dates specified in the Summer Brochure. Session I is scheduled for four weeks, Session II is scheduled for six weeks and Session III is scheduled for three weeks. Some courses are scheduled according to specific session dates and other courses are offered on dates which overlap into a different session. During Session I, students may take a maximum of four credits. During Session II, students may take a maximum of six credits. During Session III, students may take a maximum of three credits. The maximum number of credits for which any student may register during the summer is 13 .
Some Liberal Education Requirements may be offered through the Summer Program. The Summer Program is of particular interest to graduate students enrolled in credential programs or the Master of Arts in Education Program. The summer curriculum features an intensive professional preparation sequence for Preliminary Multiple Subject (elementary) and Single Subject (secondary) Teaching Credentials.

A Summer Program brochure, including the class schedule, admission requirements and registration procedure is available early in the spring semester. Offerings vary from year to year.

Summer Program courses are taught by members of Whittier College faculty and selected adjunct faculty. All courses satisfy requirements for Whittier College academic credit and may be applied toward credential and degree requirements. The Summer Intensive Program has separate admissions requirements. Additional information is available from the Office of the Registrar or from the Department of Education and Child Development.

## URBAN STUDIES

Frederic A. Bergerson, Political Science<br>Rafael Chabrán, Modern Languages and Literatures<br>Claudia Dorrington, Social Work<br>Leslie Howard, Sociology<br>Joyce P. Kaufman, Whitter Scholars Program<br>Seamus Lagan, Physics and Astronomy<br>Danilo Lozano, Music<br>Robert Marks, History<br>Paula Radisich, Art History<br>Elizabeth Sage, History<br>Cheryl C. Swift, Biology<br>Paula Sheridan, Social Work<br>Andrew Wallis, Modern Languages and Literatures

$\tau$here is a substantial interest in urban studies among both students and faculty on campus. A student can arrange a preprofessional curriculum in urban studies designed as preparation for graduate work in such fields as urban planning, design, architecture, public administration, or social service delivery. Such a curriculum can be constructed around either the Liberal Education Program or the Whittier Scholars Program. The latter option permits a selfdesigned interdisciplinary major; both options allow a disciplinary concentration complemented by relevant courses from disciplines other than those forming the core of the program. A student interested in urban planning might major in sociology, political science, or economics, focusing on the relevant urban and planning courses both within the major and in related fields. Someone more interested in design or architecture might major in art or physics and supplement this work with relevant study in other departments. Such flexibility allows for the diversity of career opportunities growing out of urban studies. The faculty listed above are available to help students design a program suited to particular areas of interest and career objectives.

Donald W. Bremme<br>Kathleen S. Ralph, Chair<br>Ivannia Soto-Hinman<br>Shannon Stanton<br>Judith T. Wagner

Ol|hittier's Graduate Education Programs include both credential and Masters of Arts in Education degree programs that further the institution's tradition of excellence in the preparation of teachers. In-depth study of various pedagogical issues occurs within the context of Whittier's liberal arts perspective. The Graduate Program faculty includes outstanding teachers and administrators with advanced academic degrees and professional experience in their specialty areas. Among the themes that unify graduate study at Whittier College are appreciation of diversity, active construction of knowledge, value of critical thinking, and lifelong learning.

## OVERVIEW OF GRADUATE PROGRAMS

Graduate offerings include the following credential programs approved by the Commission on Teacher Credentialing (CTC): Preliminary Multiple Subject Teaching Credential Programs (elementary education); and Preliminary Single Subject Teaching Credential Programs in several subject areas as described in the Teacher Education section of this catalog (secondary education).
Whittier also offers the Master of Arts in Education Degree. Qualified students may work simultaneously on the M.A. degree and a credential. Graduate students have the opportunity to study at the Broadoaks Children's School, Whittier's nationally known campus demonstration school. Graduate courses are offered in the evening during the fall and spring semesters, and also during the summer sessions.

## Credential and Graduate Admission

Admission to either the credential or the Master of Arts program is selective; meeting the minimum requirements does not guarantee admission to either program.

## Credential Program

Graduate students must complete an application for admission to the Teacher Preparation Program according to specified deadlines. Only those students accepted to the program may enroll in the core courses.
Graduate candidates applying to the credential programs must complete and submit the following to the Department of Education and Child Development:

1. The application for admission includes such items as a statement of purpose, at least two professional references, and documentation of subject matter preparation.

## 2. Passage of CBEST (California Basic Educational Skills Test)

3. Transcripts documenting the following:

- A Bachelor of Arts Degree or Bachelor of Science Degree from an accredited college or university
- Minimum 2.8 GPA in the last 60 graded units.

4. Applicants who meet the above qualifications will be contacted for an interview.

## Master of Arts in Education

Whittier College offers the Master of Arts in Education. Candidates must complete 30 units beyond the Bachelor of Arts (excluding student teaching). All 30 units must be part of an approved Educational Design for the Master of Arts in Education. During the last semester of study, students take EDUC 601: Educational Inquiry (4 credits) as their capstone course.

## Master's Degree Candidacy

Applicants seeking the Master of Arts in Education must be admitted to Master's Degree Candidacy. Students should apply as early as possible, and no later than one semester prior to the intended entry date. To apply for Master's Degree Candidacy, applicants must submit the following:

1. The application for graduate admission, which includes an essay on professional and educational goals and two professional references. Students who have previously been admitted to a credential program must complete the application for advancement to master's candidacy.
2. Transcripts of all college work documenting a Bachelor of Arts Degree or a Bachelor of Science Degree from an accredited college or university.
3. Evidence of completion of the last 23 upper division/graduate semester units with a grade point average of 3.5 or higher.
4. An Educational Design proposal that has been developed by the candidate and the Department of Education and Child Development.
5. Candidates who meet these qualifications will be contacted for an interview.

## Admission of International Students to Credential and Graduate Program

 International graduate students who wish to apply for the credential program and/ or the Master of Arts Degree program must do the following:1. Submit a completed application for graduate admission.
2. Submit transcripts verifying the completion of a baccalaureate degree. All students whose baccalaureate work was completed outside the United States or Canada at an institution where a language other than English was the dominant language of instruction must submit transcripts that have been translated and analyzed by the International Education Research Foundation, Inc. or another authorized agency before they can be accepted to the teacher credential or master's degree program. (Students already in the U.S. may be permitted to enroll in a maximum of two courses while they await transcript analysis.)

All students whose baccalaureate work was completed at an institution where a language other than English was the dominant language of instruction must submit acceptable TOEFL scores.

## Degree Requirements For the Master of Arts in Education

Candidates attain the Master of Arts in Education Degree upon successful completion of the Educational Design described below. The Department of Education and Child Development, the student's graduate advisor, and other faculty members representing the area of specialization must approve the Educational Design prior to enrolling in EDUC 601 (Educational Inquiry).
The Educational Design consists of the following:

1. Minimum of total 30 units.
2. Completion of Educational Inquiry (EDUC 601).
3. A maximum of 9 units may be transferred from other institutions All requirements for the M.A. must be completed with a 3.0 minimum GPA; no course work below a "B-"grade will be applied toward the degree. Students must complete the M.A. within five years of admission to Master's Degree Candidacy. A maximum two-year extension may be sought through petition. Courses completed prior to admission to the program may be accepted at the discretion of the Department of Education and Child Development, but in no case will a course taken more than 10 academic years prior to the date of graduation be applied to the degree. Guidelines and stipulations regarding admission to the program are available in the Department offices. Variation or amendment of the guidelines can only be obtained by petitioning the Department of Education and Child Development.

## General Information

Post-baccalaureate (graduate) students who meet all prerequisite and entrance requirements can complete all credential and Master's program requirements through evening and summer courses. Procedures and requirements for postᄀbaccalaureate students differ from those for undergraduates. These procedures and requirements are described in separate documents available from the Department. Post-baccalaureate students should obtain program information and advisement from the Department as early as possible for admission to summer and fall cohorts.

For both undergraduate and graduate students, a grade of B - or above is required in each teacher preparation course in order to enroll in the next course(s) in the teacher-preparation program sequence. When a grade below B- is earned in a course, a student must do the following before enrolling in any other teacher preparation course:

1. Petition the department for permission to retake the course in which a grade below B- was earned, and if permission is granted
2. Retake the course and earn a grade of B- or above.

## Graduate Standing

Those who have been granted baccalaureate degrees (or equivalent) from accredited colleges and universities are admitted for fifth-year work as graduate students if they have met the requirements for degree candidacy as determined by the Whittier College faculty.

Study Load
For Graduate Students, a minimum full-time study load is 9 credit hours per term.

## PREREQUISITES AND PROFESSIONAL PREPARATION REQUIREMENTS FOR TEACHING CREDENTIALS

The teacher education programs for students pursuing the Multiple Subject (elementary) and Single Subject (secondary) Teaching Credentials include planned prerequisites and professional preparation courses. Students should plan their undergraduate programs so as to take the prerequisites during their freshman and sophomore years. Professional preparation requirements are not open to freshmen or sophomores. Students should take the sequence of required professional preparation courses in the junior year and after. The prerequisites and professional preparation courses for the Multiple Subject (elementary) and Single Subject (secondary) Teaching Credentials are listed on the next page.

## GRADUATE COURSES

The following courses are open to graduate students. Most require admission to the Teacher Credentialing Program. In general these courses are not open to undergraduates. Exceptions are made only through petition to the faculty of the Department.

## GUIDELINES FOR THE PRELIMINARY MULTIPLE SUBJECT TEACHING CREDENTIAL:

Prerequisites:
Introduction to Human Development, CHDV 105, 3 credits
Sociological and Anthropological Perspectives on Education, EDUC 300/500, 3 credits

Movement Education in the Elementary School, KLS 320, 3 credits
Required professional preparation courses:
Teaching Diverse Learners, EDUC 501, 3 credits
Learning and Learners, EDUC 506, 3 credits
Literacy Development in the Elementary School, EDUC 502, 3 credits
Second Language Acquisition and Methodology, EDUC 504, 3 credits
Multiple Subject Curriculum and Pedagogy: Integrating Language Arts,
History-Social Science, and Visual-Performing Arts, EDUC 505, 3 credits
Multiple Subject Curriculum and Pedagogy: Math and Science, EDUC 507,
3 credits
Promoting Students' Health \& Safety, KLS 509, 1 credit
Working with Special Populations I \& II, EDUC 510 \& 511, 1 credit each

Student Teaching/Internship, EDUC 520, 12 credits (To qualify for student teaching or internship, students must have completed all prerequisites and subject matter requirements. Consult Department materials for a complete list.)
Professional Development Seminar, EDUC 521, 1-2 credits (Must be taken concurrently with Student Teaching/Internship.)

## FOR THE PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL:

 Prerequisites:Introduction to Human Development, CHDV 105, 3 credits or Psychology of Adolescence, PSYC 244, 3 credits
Sociological and Anthropological Perspectives on Education, EDUC 300/500, 3 credits
Required professional preparation courses:
Teaching Diverse Learners, EDUC 501, 3 credits
Learning and Learners, EDUC 506, 3 credits
Teaching Content Area Literacy, EDUC 503, 3 credits
Second Language Acquisition and Methodology, EDUC 504, 3 credits
Single Subject Curriculum and Pedagogy I, EDUC 508, 3 credits
Single Subject Curriculum and Pedagogy II, EDUC 509, 3 credits
Promoting Students' Health \& Safety, KLS 509, 1 credit
Working with Special Populations I \& II, EDUC 510 \& 511, 1 credit each
Student Teaching/Internship, EDUC 520, 12 credits (To qualify for student teaching or internship, students must have completed all prerequisites and subject matter requirements. Consult Department materials for a complete list.)
Professional Development Seminar, EDUC 521, 1-2 credits (Must be taken concurrently with Student Teaching/Internship.)

## COURSE DESCRIPTIONS (EDUC)

500 Sociological and Anthropological (Same as EDUC 300.) Examines the sociocultural and historical contexts in which learning and development occur. Topics include the social and cultural conditions of K-12 schools, the historical and cultural traditions of major cultural and ethnic groups in California society, and how the background experiences, languages, skills and abilities of members of these groups interact with schools' conditions and practices. Explores concepts, principles, and values necessary to create and sustain an equitable classroom community and a just, democratic society. Fieldwork required. One semester, 3 credits.

## 501 Teaching Diverse Learners

(Same as EDUC 401.) Provides theoretical and practical knowledge necessary for working with culturally diverse K-12 students, families, and communities. Includes analysis of alternative viewpoints on current educational
goals, practices, and issues, as well as methods for building a just democratic classroom culture. Requires 20 hours of fieldwork. Prerequisites or Co-enrollment: EDUC 500, CHDV 105, and permission. One semester, 3 credits.

## 502 Literacy Development in the Elementary School

(Same as EDUC 402.) Research and methodology for delivering a balanced, comprehensive program of instruction in reading, writing, and related language arts areas in linguistically and/or culturally diverse elementary classrooms. Topics include: basic word identification skills and comprehension strategies, literature-based instruction, ongoing diagnostic strategies/interventions, content area literacy, and organizing for instruction. Requires 20 hours of fieldwork. Prerequisite or co-enrollment: 501 and permission. One semester, 3 credits.

## 503 Content Area Literacy

(Same as EDUC 403.) Research and methodology for preparing secondary teachers to teach content-based reading and writing skills to all students. Topics include: reading comprehension skills, vocabulary, strategies for promoting oral and written language, phonological/structure of the English language, and writing across the curriculum. Requires 20 hours of fieldwork. Prerequisite or co-enrollment 501. One semester, 3 credits.

## 504 Second Language Acquisition \& Methodology

(Same as EDUC 404.) Examines native and second language development in theory and as applied to multicultural/multilingual educational contexts, helping prospective teachers develop a sound understanding of first (Ll) and second language (L2) processes. Focuses on the socio-cultural, historical, political nature of language learning in the classroom and how the educational system addresses the needs of English Language (EL) Learners. Requires 20 hours of fieldwork. Prerequisite or co-enrollment: 501, 502, or 503. One semester, 3 credits.

## 505 Multiple Subject Curriculum \& Pedagogy

Integrating Language Arts with History-Social Science and the Visual \& Performing Arts Research and methodology for integrating language arts with social studies and the visual and performing arts in linguistically and/or culturally diverse elementary classrooms. Topics include: writing in the content areas, literature-based instruction, use of simulations, case studies, cultural artifacts, cooperative projects, and student research activities, assessing learning, and organizing for instruction. Fieldwork required. Prerequisites or Co-enrollment: graduate standing, 401/501. One semester, 3 credits.

## 506 Learning and Learners

(Same as EDUC 406.) Examines major concepts, principles, and research associated with theories of human thinking, learning, and achievement, with special attention to the social-cultural nature of learning, the role of students' prior understandings and experiences, and the importance of homecommunity funds of knowledge. Provides
experience in using research-based concepts and principles in designing, planning, and adapting instruction for K-12 students. Requires 20 hours of fieldwork. Prerequisite: 401/501. One semester, 3 credits.

## 507 Multiple Subject Curriculum \& Pedagogy: Mathematics and Science

Examine the components of a well-balanced program of mathematics and science instruction. Topics in math curriculum and pedagogy include computational and procedural skills, conceptual and logical understanding, and problem-solving skills. Topics in science curriculum and pedagogy include the major concepts, principles, and investigations in science (physical, life, earth); investigation skills; how to connect science across other subject areas. Fieldwork required. Prerequisites: graduate standing, 401/501. (Concurrent enrollment in 502, 504, and/or 506 is possible with departmental permission.) One semester, 3 credits.

## 508 Single Subject Curriculum \& Pedagogy I

Introduction to secondary teaching in cultural and linguistically diverse secondary schools and classrooms for Single Subject candidates in core academic subjects. Topics include: knowing and understanding state-adopted academic content standards for students; standards-based unit and lesson planning strategies focused on learning outcomes; alternative methods and strategies for assessing students' entry-level knowledge and skills, progress monitoring and summative assessment; using technology in the classroom; developmentally appropriate instruction; laws, student and family rights, professional ethics and responsibilities. Fieldwork required. Prerequisites: graduate standing, 401/501. (Concurrent enrollment in 503, 504, and/or 506 is possible with departmental permission.) One semester, 3 credits.

## 509 Single Subject Curriculum \& Pedagogy II

Advanced instructional planning and teaching methods for Single Subject candidates in core academic subject areas, with separate course sections for candidates in the areas of (1) English or history-social sciences and
(2) mathematics or science. Focuses on appropriate subject-matter-specific methods for planning and teaching a comprehensive,
program that enables students to achieve state-adopted academic content standards. Topics for candidates in all subject areas include supporting English language learners, responding to student diversity, developing a wide repertoire of teaching methods, and effectively using instructional resources including technology. Fieldwork required. Prerequisites: graduate standing, 401/501, $403 / 503,404 / 504,406 / 506$, and 508. One semester, 3 credits.

## 510 Working with Special Populations I

For elementary and secondary preliminary credential candidates, this course provides an introduction to working with special needs students in the general education classroom. Topics include State and Federal laws pertaining to exceptional populations; referral and Individualized Educational Program (IEP) processes; assessment of the learning and language abilities of special population students; and issues of social integration of students with special needs. Fieldwork required. Prerequisites: graduate standing and 501. One semester, 1 credit.

## 511 Working with Special Populations II

 For elementary and secondary preliminary credential candidates, this course builds upon EDUC 510. Topics include the major categories of disabilities, differentiated teaching strategies, and appropriate instructional materials and technologies for working with special-needs students in general education classrooms. Fieldwork required. Prerequisites: graduate standing, 510. January, 1 credit.
## 520 Student Teaching/Internship

Carefully planned and supervised teaching experiences in school programs and grade levels selected by the Department to meet requirements for either the California Preliminary Multiple Subject or California Preliminary Single Subject Teaching Credential. Hours arranged. Concurrent enrollment in EDUC 521 required. Prerequisites: Acceptance to Credential Candidate Status and others indicated in Department materials. Please consult the Department. One semester, 6 or 12 credits. May be repeated for credit.

## 521 Professional Development Seminar

A professional development seminar for traditional and intern student teachers, this course emphasizes (1) continued professional growth through reflection on one's teaching practices and (2) developing understanding of classroom and school procedures. Topics include: establishing a positive climate for learning; using developmentally appropriate teaching practices; using instructional time effectively; communicating effectively with families and promoting family involvement in students' learning; working collegially with all staff; and exercising the professional, legal, and ethical responsibilities of teachers. Corequisite: Concurrent enrollment in 520 . One semester, lcredit. May be repeated for credit.

## 541 Advanced Broadoaks Teaching Internship

Graduate Standing. Permission required. One semester, 3 credits.

## *562 Curriculum and Procedures for Teaching Social Science (K-8)

Advanced workshop in curriculum development, teaching strategies, and learning materials in contemporary history-social science education as described in the State of California Framework and academic content standards for students. Prerequisite: 505. One semester, 3 credits.

## *564 Curriculum and Procedures for Teaching Science (K-8)

Advanced workshop in curriculum development, teaching strategies, and learning materials in contemporary science education as described in the State of California Framework and academic content standards for students. Prerequisite: 507. One semester, 3 credits.

## *568 Curriculum and Procedures for Teaching Mathematics (K-8)

 Advanced workshop in curriculum development, teaching methods, and learning materials to foster learners' understanding of numbers, numeration, relations, operations, measurement, geometry, and problem solving in accordance with the State of California Framework and academic content standards for students. Emphasizes active learning through manipulation of objects and integration of the mathematics curriculum with other content areas. Prerequisite: 507.
## *570 Curriculum and Procedures for Teaching Art (K-8)

Advanced workshop in a variety of media and methods for teaching, displaying, and evaluating K-8 students' artwork in accord with State of California Framework and academic content standards for students. Prerequisite: 505 or permission. One semester, 3 credits.

## 580 Instructional Development and Technology

For those pursuing the California Professional Multiple Subject or Professional Single Subject Teaching Credential (Level II), this course is taught through both (1) face-to-face sessions in a computer-equipped classroom and (2) online interaction using a variety of computerbased collaborative tools (enriched "chat room" environment, threaded discussion groups, web postings, and others.). Includes a self-study to identify areas for instructional improvement that both the candidate and the school site share and development of plan to improve the use of computer-based technology in the area(s) identified in self-study. One semester, 3 credits.

## 590 Selected Topics

Open only to students in Education. Time and credit arranged. May be repeated for credit.

## 599 Induction: Advanced Study in Pedagogy

 6 credits, may be repeated for a total of 12 credits.
## 601 Educational Inquiry

This course provides students with opportunities to learn to access, learn to critique, and apply a variety of modes of inquiry used in the field of education. As students explore quantitative, qualitative, and action research methods, they will learn to become critical consumers of knowledge. Students will consider key questions as they review theoretical and empirical research on an education topic of interest. The guiding element around which this course is organized is the practice of critical reflection, particularly in bringing about educational reform. This course assumes that course participants have much knowledge and experience in the field
of education. As such, this course provides participants with an intensive opportunity to reflect on practice as they plan for future action for change in the field of education. 4 units.

## 606 Educational Inquiry Project Continuation

Completion of the educational inquiry project for those students unable to complete the research requirements in one semester. A continuation fee is assessed. 0 credits.

## 607 SPSS Workshop

For students engaged in Master's thesis research, this course provides working knowledge of SPSS data analysis software. January or summer, 1 credit.

## 610 Special Thesis Research

Individualized research with faculty member. Prerequisite: 601 and permission. Two semesters, 3 credits each. May be repeated for credit.

## Additional Courses Offered

## KLS 509* Promoting Students' Health and Safety

An examination of the major laws, concepts, and principles related to student health and safety and a discussion of strategies that foster student health and contribute to a healthy learning environment. Topics include: impact of health on academic achievement, student behaviors which foster or compromise their health and safety; common chronic and communicable diseases; strategies for encouraging good nutrition; physiological and sociological effects of alcohol, narcotics, drugs, and tobacco. One semester, 1 credit.

Ohittier Law School, begun in 1975, and rededicated in 1998 at its present state-of-the-art facility in Costa Mesa, reflects the College's continuing commitment to academic excellence and individual attention. The degree of Juris Doctor (J.D.) is conferred upon successful completion of the program. The School offers full-time day, part-time day and evening programs, and an accelerated Spring Admission program. Students may specialize in and, upon graduation, receive Certificates in Children's Rights, Intellectual Property Law, International and Comparative Law, and concentrations in Criminal Law, and Business Law. The Law School also offers foreign exchange study opportunities with the University of Paris X, the University of Cantabria in Santander, Spain and the University of Sevilla, Spain. The Law School hosts five summer abroad programs in France, Spain, Israel, the Netherlands, and China, as well as, an LL.M. in U.S. Legal Studies for foreign lawyers. The School is fully approved by the American Bar Association and is a member of the Association of American Law Schools.
The Whittier tradition stresses concern for individual students' intellectual and ethical development. This tradition is reflected in admissions practices stressing diversity, a small student-to-faculty ratio (approximately 20:1), small elective classes, and individual student counseling and placement services. Whittier faculty members recognize that their teaching obligation includes considerable interaction with students. The goal of the Law School is to provide a sound legal education as preparation for careers in law, business, public service, and other fields. Its course of study and instructional policies seek to develop analytical legal reasoning, skill in communications, and a strong foundation in the fundamentals of law. The curriculum emphasizes historical precepts and the changing current of modern law relative to prevailing social needs.

## Law Campus

The Whittier Law School occupies an attractive fifteen-acre campus in Costa Mesa that provides a relaxed atmosphere for the law student. The multimillion-dollar facility sits on $130,000 \mathrm{sq}$. ft. and houses the library, clinic, tiered and seminar classrooms, courtrooms, offices for student organizations, cafeteria, bookstore, and ample study areas. Multimedia interactive classrooms incorporate the most advanced acoustic principles, and network connections are built into student desks. Costa Mesa, in Coastal Central Orange, County is convenient to the state and federal courts and law offices in Los Angeles and Orange Counties.

## The Program and its Students

Whittier Law School maintains a program with classes meeting both day and evening, offering full-time and part-time legal education. After three years at Whittier College a student may apply to the Law School. If accepted, the Whittier student would earn a B.A. from the College and a J.D. from the Law School within a six year period. A mid-year admission program begins in January in addition to the regular Fall Admission program. An Academic Success Program provides a number of academic support programs for students of varying needs, including a Summer Program for admittees who have overcome significant obstacles in achieving an education, a full-year
first-year program emphasizing study skills, and exam-taking skills, individual one-onone academic counseling, and an Early Bar Preparation program.
The Center for Children's Rights trains students to provide legal services to children and the Children's Rights Clinic offers students an opportunity to participate in all aspects of client representation. The Center for Intellectual Property Law offers an I.P. track within the J.D. program as well as a Summer Institute in Intellectual Property. The Center for International and Comparative Law prepares students for employment in law firms and public interest organizations that have an international dimension to their work. Each of the three Centers offer Fellowships, offer a specialized legal writing skills course, provide externship opportunities, and host a colloquia series.
The school's full-time program is composed primarily of students who have recently obtained their undergraduate degrees and whose interests and aptitudes have led them to seek a career in the legal profession. Students attending the parttime program comprise a variety of age groups, backgrounds, and occupations. In most cases, they are employed on a full-time basis and are seeking to further their positions in their present fields or to make a career change.
Among the current students are physicians, mathematicians, engineers, C.P.A.s, teachers, law enforcement officers, court clerks, legal secretaries, and people representing a multitude of other occupations from a broad spectrum of the community. There is no specifically required academic background for admission to law school; students are admitted from many fields. Whittier Law School has long made special efforts to provide legal educational opportunities for women and members of underrepresented ethnic groups.

## Admission

It has been the policy of the Law School from its inception to set admission and scholastic standards at a level consistent with academic excellence. The Admissions Committee undertakes an individual analysis of each potential student to determine whether the combination of factors exists, which the Committee believes to be essential for the successful completion of the study of law. These factors are many and varied. Considerable emphasis is placed on the applicant's undergraduate record and performance on the Law School Admission Test (LSAT). However, the Committee also assesses such factors as intellectual maturity, capacity for selfdiscipline, and other intangible attributes essential to success in a law program.
For details regarding admission policies and procedures, scholarships and financial aid, tuition and fees, academic calendar and schedule, physical and library resources, student organizations, honors and awards, academic standards and the course of instruction, please write to the Director of Admission at Whittier Law School, 3333 Harbor Blvd., Costa Mesa, CA 92626 or contact by phone at 714-4444141 ext. 121

$\tau$uition, fees, and room and board charges are set in the spring for the following academic year. A Schedule of Charges may be obtained directly from the Business Office or the Office of Student Financing. Tuition, room, and board fees for the January Interim are included in the fall charges. If, however, a student is enrolled for only the spring semester, and not the fall, tuition charges for January Interim will be assessed at the per credit hour fee and room/ board on a pro-rated schedule.

## Deferred Payment

For students and their parents who desire to budget for the tuition, fees, room, and board charges on an installment basis, the College has engaged the services of independent firms to handle monthly billing and collection. Further information may be obtained from the Office of Student Financing.

## Refunds

The registration deposit of $\$ 400$ (or $\$ 2,000$ for new international students) is not refundable. All housing refunds, including the $\$ 100$ room reservation deposit are made under the conditions stated in the Residential Living License Agreement. The deposit is not refundable if the application for housing is canceled prior to occupancy.
Meal plan fees are refundable upon approval from the Dean of Students on a per case basis. No refund or credit is made for missed meals. Meal tickets are not transferable, and a fine is imposed for unauthorized use. A fee is charged for the replacement or exchange of a meal ticket or identification card.
January Interim meal adjustments will be made by the Business Office, 30 days prior to the session, only for students with approved absences. There is no refund for room or tuition if absent for the January Interim.

## Cancellation of Charges and Federal Title IV Refund Policy

Since Whittier College makes faculty engagements and other commitments for the entire year, the following tuition cancellation schedule has been established so that students share the cost when it is necessary for them to drop a course or withdraw from the College. These commitments are not subject to change, even though the number of students may vary. For this reason, no deviations from the tuition cancellation schedule will be made. This policy applies to all undergraduate and graduate students who withdraw or take a leave of absence, whether or not they have federal Title IV financial aid.

## Withdrawal or Leave of Absence Process

Students who plan to withdraw or take a leave of absence from Whittier College must contact the Dean of Students office immediately. A student is not considered on leave or to have officially withdrawn from the College until the student submits a completed and signed Withdraw or Leave of Absence Form to the Dean of Students office. If the Withdraw or Leave of Absence Form is not submitted on a business day, the form will not be processed until the next business day. This date will also be used to calculate tuition cancellations whenever applicable.
Students who fail to notify the Dean of Students office of their withdrawal or leave of absence will not qualify for tuition cancellation of any kind. Upon approval from the Dean of Students, notification of the withdrawal will be forwarded to the Student Financing Office, the Business Office and the Registrar to assure timely adjustments to student accounts.

## Cancellation of Institutional Charges

Based on the date of the withdrawal or leave of absence from the College, a student may receive a pro-rated cancellation of that semester's direct costs for tuition, room and board. Please see the Living License Agreement, generated by the Office of Residential Life, for the schedule of room and board fees and withdraw dates. Indirect costs such as fees, insurance and book purchases will not be subject to proration or refund.
Tuition cancellation schedule

Withdrawal Date
During week 1
During week 2
During week 3
During week 4
During week 5
During week 6
After Week 6

Policy
$100 \%$ of tuition will be cancelled
$90 \%$ of tuition will be cancelled
$80 \%$ of tuition will be cancelled
$70 \%$ of tuition will be cancelled
$60 \%$ of tuition will be cancelled
$50 \%$ of tuition will be cancelled
$0 \%$ of tuition will be cancelled

For Summer Sessions, tuition cancellation policy will be applied based on the same schedule. However, the number of weeks in the semester is replaced by the number of days in the session. For example, week 1 will be replaced by first day of class, week 2 is equivalent to second day of class, week 3 equals third day of class etc....
If a student is suspended, dismissed, expelled or asked to leave the College for any reason the student is not eligible for tuition, room, board, insurance, or fees cancellation.

## Return of Title IV Funding - Financial Aid

When a student withdraws or takes a leave of absence from the College, his or her federal financial aid must be returned to the government. The date of withdrawal or leave of absence Whittier College uses for Return of Title IV Funds shall be the date the student submits a completed and signed Withdraw or Leave of Absence Form to the Dean of Students office. The Office of Student Financing (OSF) will apply federal, state and institutional policy to determine the amount of funding - if any - that must be returned to the Department of Education, as well as any entity of student or parent aid assistance programs.
Title IV Funds include the following programs:
Pell Grants
Federal Supplemental Educational Opportunity Grants (FSEOG)
Stafford Loans
Perkins Loans
Parent/PLUS Loans
When calculating the return of federal aid, Whittier College uses the Department of Education's formula and software to arrive at the amount that must be returned upon a student's withdrawal or leave of absence. A copy of this calculation worksheet will be included in the student's file and can be forwarded to the student upon request. The percentage of Title IV assistance earned will be equal to the percentage of the semester completed by the student, when said percentage is less than $60 \%$. If a student withdraws after the completion of $60 \%$ of the semester, the percentage of aid earned during this time will be $100 \%$. For more information, please $\log$ on to www.ed.gov and search "Return of Title IV".
Federal Work Study funds are excluded from the return of Title IV process.
However, upon notification of withdrawal a student will forfeit his or her remaining work study allocation because these funds are paid when earned.
Title IV Funding is returned in the following order:

1. Unsubsidized Stafford Loans
2. Subsidized Stafford Loans
3. Federal Perkins Loans
4. Parent/Plus Loans
5. Pell Grant
6. SEOG(supplemental educational opportunity grant)
7. Other Title IV funds

## Return of Institutional Aid

When a student withdraws or takes a leave of absence from the College, financial aid given by the College is also returned to its original source. Institutional aid consists of restricted and unrestricted scholarships, Whittier Grants, endowments and also Whittier Loans. The refund or cancellation of institutional financial aid shall follow the pro-rata policy of the "Cancellation of Institutional Charges." The date of withdrawal or leave of absence Whittier College uses for the return of institutional aid shall be the date the student submits a completed and signed Withdraw or Leave of Absence Form to the Dean of Students office.

## Notification to Students

Students will be notified of all changes to their account via student billing statements.

Please note that withdrawing from Whittier College, regardless of circumstance, does not release students from financial obligations.

## College Policy

The College reserves the right to credit wages earned by students employed by the College or refundable deposits against unpaid accounts. Student grades or transcripts will not be issued, nor degrees conferred until after all financial obligations to the College have been satisfied.

Alex, Bernard
Director, Campus Safety
B.A., University of Southern California
M.P.A., California State University,

Dominguez Hills
Bak, John
Director of Foundation Relations
B.A., Harvard University
M.F.A., American Film Institute

Borst, Charlotte G.
Vice President for Academic Affairs and Dean of Faculty
B.A., Boston University
M.A., Tufts Universtiy
M.A., Ph.D., University of Wisconsin

Bortman, Lisa
Associate Dean and Director of First Year
Programs, Advising and Assessment
B.S., Northeastern University

Ed.D., University of Massachusetts
Cardenas, Sally A.
Director, Internships and Community Based Learning
B.A., M.S., California Statue University, Long Beach

Carnevale, David
Director of Student Financing B.A., Whittier College
M.S., Mount St. Mary's College

Cheatham, Richard
Director, Video Production
B.A., Whittier College
M.Rel., Claremont School of Theology
M.S., Ph.D., University of Southern

California
Clark, Rick
Director of Student Activities
B.S. and M.S., University of Wisconsin
at La Crosse
Coleman, Robert
Director of Athletics
B.A., St. Leo University
M.Ed., Springfield College

Dunkelman, James
Vice President for Finance \& Administration B.S., California State University, Los Angeles C.P.A.

Feng, Jeffrey Y.
Associate Director of Computing and Telecommunication Services
B.A., Beijing Second Foreign Language Institute
M.A., State University of New York, Albany

Greenup, Troy
Director of Computing and
Telecommunication Services
B.A., M.B.A., Whittier College

Hau, Hoang
Executive Director of Finance and Business Services
B.A., Saigon University
B.S., California State University, Fresno
M.B.A., California State University, Los

Angeles
Herzberger, Sharon D.
President
B.A., Pennsylvania State University
M.A., Ph.D. University of Illinois

Hoffman, Joy
Director of the Cultural Center
B.A., Concordia University
M.Ed., Azusa Pacific University

Hudson, Delaphine
Assistant Dean of Students and Director of
Housing
A.S., Wayne County Community College
B.A., Saginaw Valley State College
M.A., Central Michigan University

Kaufman, Joyce
Associate Academic Dean and Director of the Whittier Scholars Program
B.A., M.A., New York University

Ph.D., University of Maryland
McKernan, George
Director of Conference Services
B.S., East Stroudsburg University
M.S., Shippensburg University

Meyer, Lisa D.
Vice President of Enrollment
B.A., Willamette University
M.A., Boston College

Miller, Kieron
Director of Admission
B.A., Loyola Marymount University

O'Foghludha, Ria
Associate Director of Whittier Scholars
Program
A.B., M.A., Duke University
M.Phil., Ph.D., Columbia University

Ortiz, Jeanne
Dean of Students
B.S., Mansfield State University
M.A., Michigan State University

Ph.D., State University of New York
Palmer, David
Production Coordinator/Theatre Manager
B.A., M.A., M.F.A., California State

University, Long Beach
Porter, Shikana
Director, Student Counseling
B.A., San Diego State University
M.A., Ph.D., California School of

Professional Psychology
Rakoczy, Dana
Director of External Relations
B.A., Scripps College

Rios, Rosalba
Director of Disability Services
B.S., Biola University
M.S., California State University, Fullerton

Robison, Elizabeth Power
Vice President for Advancement
B.A., Brandeis University
M.B.A., University of Southern California

Ross, Linda
Director, Career Services
B.A., Santa Clara University

Smith, R. Fritz
Associate Dean of Faculty
B.A., Pomona College
M.S., California State University, Los

Angeles
Ph.D., University of California, Irvine
Van Ellis, Wayne W.
Assistant Dean of Records, Registration, and
Student Information Systems
B.A., Concordia University Chicago
M.A., Webster University

Wagner, Judith
Director of Broadoaks Children's School
B.S., Longwood College
M.Ed., University of Toledo

Ph.D., University of Pittsburgh
Wiberg, Kristin
Executive Assistant to the President
B.A., Scripps College

Ed.M., Harvard University
Wright, Lisa
Director of Leadership Giving
B.S., University of Arizona
M.Div., Claremont School of Theology

## BOÁrD OF TRUSTEES

## OFFICERS OF THE BOARD

Richard I. Gilchrist '68
Chairman
Willard V. Harris, Jr. '55, L.H.D. '02
Vice Chairman
Ernie Z. Park
Secretary
Donald E. Wood, L.H.D. '98
Treasurer

## TRUSTEES EMERITI

Richard H. Deihl '49
Rayburn S. Dezember '53
Charlotte D. Graham, L.H.D. '99.
R. Chandler Myers, LL.D. '88

Hubert C. Perry '35
Anthony R. Pierno '54
Elden L. Smith '62
Maxine (Murdy) Trotter '47, L.H.D. '09
Roberta G. Veloz '57

## PRESIDENT OF THE COLLEGE

Sharon D. Herzberger, Ph.D.

## PRESIDENT EMERITUS

Eugene S. Mills, Ph.D., LL.D.

## PRESIDENTS OF WHITTIER COLLEGE

Charles E. Tebbetts, A.B.; Ph.B.; A.M.; D.D. (1901-1907)

Thomas E. Newlin, B.S.; A.M.; Ph.M.; LL.D.; D.D. (1907-1915)

Absolom Rosenberger, A.B.; LL.B.; LL.D.; D.D. (1915-1918)

Harry N. Wright, Ph.D. (1918-1923)
Walter F. Dexter, A.B.; M.A.; Ed.D.; LL.D. (1923-1934)

Herbert E. Harris, Ph.D.; Litt.D. (Acting President 1933-1934)

William O. Mendenhall, Ph.D.; D.D. (1934-1943)

William C. Jones, A.B.; M.B.A.; Ph.D.; LL.D.; L.H.D. (1943-1951)

Paul S. Smith, A.B.; M.A.; Ph.D.; L.H.D.; LL.D. (1951-1969)

Frederick M. Binder, B.A.; M.A.; Ph.D.; LL.D.; Litt.D.; L.H.D.; Ped.H. (1970-1975)
W. Roy Newson, B.A.; M.A.; Ph.D.; L.H.D. (1975-1979)

Eugene S. Mills, A.B.; M.A.; Ph.D.; LL.D.; L.H.D.; LL.D. (1979-1989)

James L. Ash, Jr., B.A.; M.A.; M.Th.; Ph.D. (1989-1999)

Katherine Haley Will, B.A.; A.M.; Ph.D. (1999-2004)

Janice A. Legoza, B.A.; M.P.A (Interim President 2004-2005)

Sharon D. Herzberger, B.A.; M.A.; Ph.D. (2005)

## TRUSTEES (YEAR FIRST ELECTED)

Steven C. Ai '76
President/CEO
City Mill Company, Ltd Co. Honolulu, HI (2002)

James M. Brown '71
Sr. Vice President \& Principal Financial Officer
The Capitol Group Companies, Inc. Palos Verdes Estates, CA (2009)

Christopher T. Cross '62
Chairman
Cross \& Joftus, LLC
Danville, CA (2000)

Vincent J. Daigneault '85
Vice President, Wealth Management
Smith Barney
Glendora, CA (2004)
Kristine E. Dillon '73
President
Consortium on Financing Higher
Education
Brighton, MA (1997)
Peter E. Feinberg '82
Managing Director
Oppenheimer \& Company
Short Hills, NJ (2006)
Shane Cox Gad '71
Principal Owner
Gad Consulting Services
Cary, NC (2006)
Richard I. Gilchrist '68
President
Irvine Company Investment Properties
Group
Newport Coast, CA (1999)
Alfred J. Gobar '53, M.A. '55, L.H.D. '05
President, Retired
Alfred Gobar Associates, Inc.
Fullerton, CA (1992)
Alan "Rusty" Gregory
CEO Mammoth Mountain Ski Area
Mammoth Mountain Ski Area
Mammoth Lakes, CA (2008)
Barbara Ondrasik Groce '57
Educator
La Jolla, CA (1992)
Willard V. Harris, Jr. '55, L.H.D. '02
President
Harris Taylor Management
Newport Beach, CA (1979)
Wayne S. Harvey '60
Managing Partner, Retired
Harvey \& Parmelee, LLP
Rancho Mirage, CA (2000)
Charles E. Hawley, Jr. '51
Businessman, Retired
Whittier, CA (2000)

Donald J. Herrema '74
Senior Advisor
Stone Point Capital
New York, NY (1995)
Caroline Patterson Ireland '43
Community Leader
Birmingham, AL (1986)
Edwin Y. Keh '79
Sr. VP and Chief Operating Officer
Wal-Mart Global Procurement
Hong Kong (2008)
Alan H. Lund ' 71
Vice Chairman and CFO
International Lease Finance Company
Los Angeles, CA (2000)
David D. Mandarich
President and Chief Executive Officer
MDC Holdings, Inc.
Denver, CO (1996)
Sharon W. McLaughlin
Community Leader
Newport Beach, CA (1983-90, 1992)
James E. Mitchell '62
General Partner
Mitchell Partners, LLP.
Pebble Beach, CA $(1983-2000,2004)$
Ernie Z. Park
Attorney-at-Law
Bewley, Lassleben \& Miller
Huntington Beach, CA (1992)
James R. Parks
Executive Director
CBIZ MHM, LLC
Pebble Beach, CA (2007)
Edward O. Petersen '93
Executive VP for Sales \& Marketing
Intelius, Inc.
Seattle, WA (2007)
Richard S. Ruben
Jones Day
Laguna Hills, CA (2009)
Ruth B. Shannon, L.H.D. '92
Community Leader
Whittier, CA (1979)

Geoffrey C. Shepard '66
Executive Vice President
Karr Barth Associates
Media, PA (2002)
Judith (Kjellberg) Swayne '63
Community Leader Laguna Beach, CA (2000)

Alfred R. Villalobos '65
Chairman E Senior Manager
ARVCO Capital Research, LLC.
Zephyr, NV (2004)
Donald E. Wood, L.H.D. '98
President
Community Honda
Whittier, CA (1975)

## COLLEGE ALUMNI TRUSTEE

Robert Zemsky '62
Chair
The Learning Alliance, Univ. of Pennsylvania
Beach Bottom, PA (2008)

WHITTIER LAW SCHOOL ALUMNI TRUSTEE

Timothy A. Lambirth '78
Attorney \& Mediator
Valencia, CA (2006)

## ALUMNI ASSOCIATION REPRESENTATIVE

Dennis Welch '68
Dentist
Kirkland, WA (2008)

PRESIDENT OF THE ALUMNI ASSOCIATION

Rachel (Homel) Rice '96
Educator, Gate Department Chair San Diego City Schools
Santee, CA (2008)

Adams, Charles S.
Professor of English Language and Literature, 1984
A.B., University of California, Davis
M.A., Ph.D., University of Washington

Augugliaro, Mary.
Assistant Professor/Library (Learning and
Research Services), 2006
B.S., Rutgers University
M.S., San Jose State University

Bak, John
Assistant Professor of Theatre and
Communication Arts/Director, Fdn. Relations, 2007
B.A., Harvard University
M.F.A., American Film Institute

Barlow, Kathy
Assistant Professor of Kinesiology and Leisure Science, 2004
B.S., M.S., Louisiana Tech University

Ph.D., Texas Women's University
Barnstone, Tony D.
The Albert Upton Professor of English
Language and Literature, 1995
B.A., University of California, Santa Cruz
M.A., Ph.D., University of California, Berkeley

Bell, Priscilla B.
Associate Professor of Chemistry, 1982
B.S., Mt. Union College
M.S., Ph.D., Ohio State University

Bergerson, Frederic A.
Professor of Political Science, 1971
B.A., Johns Hopkins University

Ph.D., Vanderbilt University
Borst, Charlotte
V.P. for Academic Affairs and Dean of Faculty,

2009, Professor of History, 2009
B.A., Boston University
M.A., Tufts University
M.A., Ph.D., University of Wisconsin

Bourgaize, David B.
The Fletcher Jones Professor of Molecular Genetics, 1996
B.S., B.A., Ohio Northern University

Ph.D., University of Massachusetts
Bremme, Donald W.
Professor of Education and Child
Development, 1991
A.B., A.M., Stanford University
M.A., University of California, Berkeley

Ed.D., Stanford University

Camparo, Lorinda B.
Professor of Psychology, 1996
B.A., Barnard College of Columbia

University
B.A., California State University,

Dominguez Hills
M.A., Ph.D., University of California, Los

Angeles
Carbine, Jason
Assistant Professor of Religious Studies, 2007
B.A., Bowdoin College
M.A., Ph.D., University of Chicago

Carbine, Rosemary
Visiting Assistant Professor of Religious
Studies, 2007
A.B., Georgetown University
M.A., Ph.D., University of Chicago

Chabrán, H. Rafael
Professor of Modern Languages and
Literatures, 1985
B.A., University of California, Berkeley
M.A., San Jose State University

Ph.D., University of California, San Diego
Chaidez, Sonia
Irvine Fellow in Media and Learning, 2008
B.S, M.A., California State Polytechnic

University, Pomona
Cheatham, Richard
Assistant Professor/Director of Video
Productions, 1972
B.A., Whittier College
M.Rel., Claremont School of Theology
M.S., Ph.D., University of Southern

California
Chirol, Marie-Magdeleine
Professor of Modern Languages and
Literatures, 1996
M.A., Ph.D., University of Maryland, College Park

Collins-Dogrul, Julie
Assistant Professor of Sociology, 2008
B.A., M.A., Ph.D., University of California, Davis

Cook, Stephen
Associate Professor of Music, 2002
M.M., B.A., University of South Carolina
D.M.A., University of Southern California

Crain, David W.
Visiting Assistant Professor of Business
Administration, 2004
B.S., M.S., Ph.D., University of Southern California

Da Roza, George A.
Assistant Professor of Modern Languages and Literatures, 2005
B.A., Whittier College
M.Div., Weston School of Theology
M.A., Seton Hall University

Ph.D., University of Southern California
Decker, Jeffrey N.
Associate Professor of Business Administration, 1992
B.B.A., M.B.A., Kent State University

Ph.D., Claremont Graduate University
Dmohowski, Joseph F.
Associate Professor/Library (Serials Librarian), 1985
B.A., M.A., California State University, Los

Angeles
M.S.L.S., University of Southern California

Dorrington, Claudia
Associate Professor of Social Work, 1999
B.S., South Bank University, England
M.S.W., Ph.D., University of California, Los

Angeles
Duran, Daniel
Associate Professor of Business Administration, 2002
B.A., M.L.S., University of California, Berkeley
Ph.D., University of Wisconsin, Madison
Eastman, Charles L.
Assistant Professor/Director of the College
Writing Program, 1999/2006
B.A., California State University, Long Beach
M.A., California State University, Chico

Fradinger, Erica A.
Assistant Professor of Biology, 2007
B.S., Queen's University, Ontario

Ph.D., University of Victoria, British
Columbia
Furman-Adams, Wendy
Professor of English Language and Literature, 1981
B.A., California State University, Los

Angeles
M.A., California State University, Long Beach
Ph.D., University of Southern California
Garabedian, Michael
Assistant Professor/Library (Coordinator
of Library Technologies and Collections
Development), 2008
M.A., Northwestern University

MLIS, University of California, Los Angeles

Geirola, Gustavo
The Hazel Cooper Jordan Professor in Arts and Humanities, 1985
Professor of Letters, University de Buenos
Aires, Argentina
Ph.D., University of Arizona
Goldberg, Stephen R.
The Roy E. and Marie G. Campbell Professor of Biology, 1970
B.A., Boston University
M.S., Ph.D., University of Arizona

Gonzalez, Gilberto
Assistant Professor of Theatre and Communication Arts, 2005
B.A., University of Wisconsin, Parkside
M.F.A., University of Virginia

Gotsch, Susan D.
Professor of Sociology, 2003
B.A., Valparaiso University
M.A., Ph.D., Bryn Mawr College

Gottschall, Marilyn
The C. Milo Connick Associate Professor of
Religious Studies, 1998
B.A., Lock Haven University
M.S.W., Carleton University, Canada

Ph.D., University of Southern California
Herrick, Jenny
Assistant Professor of Art and Art History, 2007
B.F.A., Rhode Island School of Design
M.F.A., Yale University School of Art

Herzberger, Sharon D.
President of the College, 2005
Professor of Psychology, 2005
B.A., Pennsylvania State University
M.A., Ph.D., University of Illinois

Hickey, Ann
Assistant Professor of Kinesiology and Leisure
Science, 2007
B.A., Whittier College

Ph.D., University of Southern California
Hill, Charles T.
Professor of Psychology, 1982
B.A., University of Oregon
M.S., M.A., University of Washington

Ph.D., Harvard University
Holmes, Jennifer
Associate Professor of Theatre and
Communication Arts, 2002
B.A., State University of New York, Purchase
M.A., Ph.D., Northwestern University

Hunt, David P.
Professor of Philosophy, 1981
B.A., Pomona College
M.A., Ph.D., Vanderbilt University

Iimoto, Devin S.
Professor of Chemistry, 1990
B.A., Carlton College
M.S., Ph.D., University of California, San

Diego
Isovitsch, Ralph
Assistant Professor of Chemistry, 2006
B.S., Grove City College

Ph.D., Louisiana State University
Iyam, David
Associate Professor of Anthropology, 1999
B.A., University of Calabar, Nigeria
M.A., M.F.A., Ph.D., University of

California, Los Angeles
Jauregui, Danny
Assistant Professor of Art, 2009
B.A., Maryland Institute College of Art
M.A., University of California, San Diego
johnston, sal a.
Associate Professor of Sociology, 1996
B.S., M.S., Grand Valley State University,

Michigan
Ph.D., University of Oregon
Kakaliouras, Ann M.
Assistant Professor of Anthropology, 2006
B.A., Hamline University

Ph.D., University of North Carolina
Kaufman, Joyce P.
Director of the Whittier Scholars Program, 1997
Professor of Political Science, 1985
B.A., M.A., New York University

Ph.D., University of Maryland
Keny, Sharad
Professor of Mathematics, 1986
M.S., University of Bombay, India
M.A., Ph.D., University of California, Los

Angeles
Kjellberg, Paul
Professor of Philosophy, 1993
B.A., Yale University

Ph.D., Stanford University
Kozek, Mark
Assistant Professor of Mathematics, 2007
A.B., Ed.M., Harvard University
M.A., Wake Forest University

Ph.D., University of South Carolina

Lagan, Seamus
Professor of Physics and Astronomy, 1988
B.A., Dublin University, Ireland
M.S., Ph.D., Lehigh University

Laine, Charles R.
The John A. Murdy Professor of Business Administration, 1976
B.A., California State University, Stanislaus
M.A., Ph.D., University of California, Davis

Lamar, Simon
Assistant Professor of Economics, 2004
B.A., Universidad Central de Venezuela,

Caracas
M.A., Temple University
M.A., Ph.D., Claremont Graduate University

Lee, Horng-Yi
Assistant Professor of Modern Languages and Literatures, 2008
B.A. National Chengchi University, Taiwan
M.A., Ph.D. University of Southern

California

LeVelle, Teresa
Associate Professor of Music, 2000
B.M. Southwestern College, Kansas,

Aspen School of Music
M.M. Bowling Green State University
D.M. Indiana University

Lindgren, Eric
Assistant Professor of Political Science, 2008
B.S., San Francisco State University
M.S., Ph.D., University of Oregon

Lozano, Danilo
Professor of Music, 1993
B.M., University of Southern California
M.A., University of California, Los Angeles

Lutgen, Jeffrey
Associate Professor of Mathematics, 1994
B.A., California State University, Sacramento
M.S., Ph.D., University of Oregon

Marks, Robert B.
The Richard and Billie Deihl Distinguished Professor of History, 1978
B.A., M.A., Ph.D., University of Wisconsin, Madison

Mbora, David N.M.
Assistant Professor of Biology and
Environmental Science, 2009
B.S., Moi University, Eldoret, Kenya
M.S., University of Cape Town, South Africa

Ph.D., Miami University

McBride, Michael J.
Professor of Political Science, 1969
B.A., M.A., Ph.D., Purdue University

McEnaney, Laura
The Nadine Austin Wood Professor of American History, 1996
B.A., M.A., Ph.D., University of Wisconsin, Madison

Metzger, Christine
Assistant Professor of Environmental Science, 2008
B.S. Washington and Lee University
M.S., Temple University

Ph.D., University of Oregon-Candidate
Miller, Jeffrey
Assistant Professor of Mathematics, 2004
B.S., University of California, Davis
M.A., Ph.D., University of California, Santa

Barbara
Milosavljevic, Milica
Assistant Professor of Business Administration, 2008
B.S., M.B.A., Elon University

Ph.D., Florida Atlantic University
Morris, Sean
Associate Professor of English Language and Literature, 2000
A.B., Vassar College
M.A., University of Michigan

Ph.D., State University of New York, Stony
Brook
Moskun, Amy
Assistant Professor of Chemistry and
Environmental Science, 2007
B.S., Linfield College

Ph.D., Cornell University
Muller, David J.
Professor of Music, 1983
B.M.E., Temple University
M.M., Cleveland Institute of Music

Neu, John H.
Professor of Political Science, 1971
A.B., J.D., Creighton University
M.A., Harvard University

Ph.D., University of Nebraska
Nino, Lana
Associate Professor of Business Administration, 2002
B.S., California State University, Long Beach
M.S.B.A., California State University,

Pomona

Norden, Deborah
Associate Professor of Political Science, 2000
B.A., University of Michigan, Ann Arbor
M.A., Ph.D., University of California,

Berkeley
O'Connor-Gomez, Doreen M.
Professor of Modern Languages and Literatures, 1991
B.A., M.A., Ph.D., Catholic University

O'Foghludha, Ria M.
Associate Professor of Art and Art History, 1993
A.B., A.M., Duke University
M.Phil., Ph.D., Columbia University

Orozco, Jose
Associate Professor of History, 1996
B.A., University of California, Santa Cruz
M.A., Ph.D., Harvard University

Ortega, José Guadalupe
Assistant Professor of History, 2007
B.A., M.A., Ph.D., University of California, Los Angeles

Overmyer-Velázquez, Rebecca
Associate Professor of Sociology, 2003
B.A., San Francisco State University
M.A., Ph.D., University of California, Santa

Barbara
pAddy, dAvid iAn
Professor of English Language and Literature, 1996
B.Ph., Miami University
M.A., American University

Ph.D., University of Maryland, College Park
Perez, Joanna
Assistant Professor/Library (Information
Fluency \& Digital Initiatives Librarian), 2008
B.A. California State University, Long Beach
M.A., University of California, Los Angeles

Piner, Glenn
Associate Professor of Physics and Astronomy, 2000
B.S., M.S., Ph.D., University of Maryland

Price, Joseph L.
The Genevieve Schaul Connick Professor of
Religious Studies, 1982
B.A., Georgetown College
M.Div., Southern Baptist Theological

Seminary
M.A., Ph.D., University of Chicago

Radisich, Paula R.
Professor of Art and Art History, 1983
B.A., M.A., Ph.D., University of California,

Los Angeles
Rajaram, Geetha
Assistant Professor of Economics, 2006
B.A., University of California, San Diego

Ph.D., University of Colorado
Ralph, Kathleen
Associate Professor of Education and Child
Development, 1995
B.S., Washington State University
M.A., Ph.D., Arizona State University

Redwine, Karen
Visiting Assistant Professor of Psychology, 2008
B.A., M.A., California State University, San

Marcos
Ph.D., Claremont Graduate University
Reed, Brian A.
Professor of Theatre and Communication Arts, 1988-89, 1990
B.A., University of California, Riverside
M.F.A., Humboldt State University

Rehn, Andrea
Assistant Professor of English Language and
Literature, 2007
B.A., Berkeley
M.A., Ph.D., Cornell University

Reeg, Charles F.
Professor of Chemistry, 1971
B.A., Dana College

Ph.D., University of Colorado
Riskin, Adrian
Associate Professor of Mathematics, 2003/2008
B.A., M.A., Ph.D., University of California, Davis

Romney, Charles
Visiting Assistant Professor in History, 2009
B.A., Pomona College
M.A., Ph.D., University of California, Los

Angeles
Sage, Elizabeth
Associate Professor of History, 2000
B.A., University of California, Los Angeles
M.A., Ph.D., University of Chicago

Sanders, Kay
Assistant Professor of Child Development, 2004
B.A., University of Michigan
M.S., California State University, Los

Angeles
Ph.D., University of California, Los Angeles

Sebanc, Anne
Associate Professor of Child Development, 1999
B.S., University of California, Davis

Ph.D., University of Minnesota
Shaikh, Ayesha
Associate Professor of Psychology, 2003
B.A., University of California, Los Angeles
M.A., Ph.D., Miami University

Sheridan, Paula
Associate Professor in Social Work, 1997
Director of Social Work Program, 1997
B.A., Louisiana Tech University
M.S.W., Louisiana State University
M.A., Southwestern Baptist Theological

Seminary, Texas
Ph.D., University of Southern California
Sloan, David
Associate Professor of Art and Art History, 1988
B.A., University of Maryland
M.F.A., Washington University, St. Louis

Smith, R. Fritz
Associate Dean of Faculty, 2002
Professor of Mathematics, 1976
B.A., Pomona College
M.S., California State University, Los

Angeles
Ph.D., University of California, Irvine
Soto-Hinman, Ivannia
Assistant Professor of Education, 2009
B.A., M.A., Biola University
M.A., University of La Verne

Ph.D., Claremont Graduate University
Stanton, Shannon M.
Assistant Professor of Education, 2005
B.A., University of California, Los Angeles

Ed.M., Harvard University
Ph.D., University of California, Berkeley
Swift, Cheryl C.
The James Irvine Foundation Professor of Biology, 1991
A.B., Occidental College

Ph.D., University of California, Los Angeles
Switzer, Michelle K.V.
Associate Professor of Philosophy, 1998
B.A., Oberlin College
M.A., Ph.D., University of Toronto

Valenzuela, Hector Fernando
Assistant Professor of Biology, 2006
B.S., San Diego State University

Ph.D., University of California, Los Angeles

Van Oosbree, Patricia A.
Assistant Professor of Kinesiology and Leisure Science, 1993
B.A., M.S., Northwestern Missouri State University
M.S., University of Wisconsin, La Crosse Ph.D., Texas Woman's University

Vetrone, Sylvia A.
Assistant Professor of Biology, 2006
B.S., Whittier College

Ph.D., University of California, Los Angeles
Volckmann, David B.
Professor of Psychology, 1970
B.A., Hamilton College

Ph.D., Indiana University
Wagner, Judith T.
Professor of Education and Child Development, 1984
Director of Broadoaks, 1984
B. S., Longwood College
M.Ed., University of Toledo

Ph.D., University of Pittsburgh
Wallis, Andrew
Associate Professor of Modern Languages and Literatures, 1999
M.A., Middlebury College
B.A., Ph.D., University of Georgia, Athens

Woirol, Gregory R.
The Douglas W. Ferguson Professor of Economics and Business Administration, 1976 B.A., University of Washington Ph.D., University of California, Berkeley

Zorba, Serkan
Assistant Professor of Physics and Astronomy, 2004
B.S., Hacettepe University, Ankara, Turkey M.A., Ph.D., University of Rochester

FACULTY EXECUTIVE COUNCIL, 2009-2010

Joe Price, Chair
Doreen O'Connor-Gomez, Vice Chair
Jason Carbine, Secretary and Treasurer
Shannon M. Stanton, At Large Representative
Jennifer Holmes, Humanities/Fine Arts Representative
David Iyam, Social Science Representative
Erica Fradinger, Natural Science Representative

## EMERITUS FACULTY

Archer, Richard L., B.A., M.A., Ph.D., Professor, History (1975-2004)

Behrens, Maurine, B.S., M.A., Ph.D. Professor, Psychology (1973-2003)

Breese, Donald H., B.A, Ph.D.
Professor, History (1961-1997)
Carlyle, Irene V., B.A., M.A.
Associate Professor, Speech Pathology and Audiology (1978-2001)

Dean, John F., B.S., M.A., Ed.D. Professor, Education (1970-1992)

Eaton, Thelma L., B.A., M.S.W., D.S.W. Professor, Social Work (1970-1994)

Fairbanks, Joseph, B.A., M.A., Ph.D. Professor, History (1970-1997)

Farmer, Ann D., B.A., M.A., Ph.D. Associate Professor, English (1972-1999)

Fattahi, Abi, B.S., M.S., Ph.D. Professor, Mathematics, (1981-2007)

Finan, Mary Casey, B.A., M.A., Ph.D. Associate Professor, Business Administration (1987-2002)

Geiger, William, B.A., M.A., Ph.D. Professor of English Language and Literature (1965-2009)

Godfrey, John H., B.A., B.Ed., M.A. Associate Professor, Physical Education (19571984)

Gothold, Stephen A., B.A., M.A., D.M.A. Professor, Music (1977-2003)

Grasty, George M., B.A., M.A. Assistant Professor, German (1957-1980)

Hanson, A. Warren, B.S., M.S., Ph.D. Professor, Biology (1970-2004)

Harvey, Richard B., B.A, M.A., Ph.D. Professor, Political Science (1960-2000)

Howard, Leslie L., B.A., M.A., Ph.D. Professor, Sociology, (1981-2008)

Ibrahim, Hilmi, B.P.E., B.A., M.A., Re.D. Professor, Kinesiology and Leisure Science, (1964-2007)

Kiley, Anne, B.A., M.A., Ph.D.
Professor, English Language and Literature (1972-2005)

Leighton, Beach, B.S., M.S., Ph.D.
Professor, Geology (1951-1974)
Mass, Amy L., B.A., M.S.W., D.S.W,
Professor, Social Work (1983-1998)
McEwen, Gilbert D., B.A., M.A., Ph.D.
Professor, English (1955-1985)
Mills, Eugene S., B.A., M.A., Ph.D., LL.D., L.H.D.
Professor, Psychology (1952-1962)
President (1979-1989)
Nobert, Frances, B.M., M.M., D.M.A.
Professor, Music (1982-1999)
Nuttall, Donald A., B.A., M.A., Ph.D. Professor, History (1961-2002)

O'Brien, Philip, B.A., M.S.L.S., Ph.D.
College Librarian and Professor (1962-66, 1973-2006)

Ochse, Orpha, B.A., M.M., Ph.D.
Professor, Music (1969-1987)
O'Connor, Lucy A., B.A., M.A., Ph.D., Professor, Psychology( 1970-2008)

Olson, Emelie A., B.A., M.A., Ph.D. Professor, Anthropology (1973-2002)

Overturf, Stephen F.B.A., M.A., Ph.D.
Professor, Economics (1971-2002)
Speier, Robert, B.F.A., M.F.A.
Associate Professor, Art (1970-1989)
Topjon, Ann, B.A., M.S.L.S.
Public Services Librarian/Associate Professor (1981-2006)

Treser, Robert, B.S., M.F.A., Ph.D.
Professor, Theatre Arts (1965-1993)
Vick, Mary Ellen, B.A., M.S.L.S.
Assistant Librarian and Associate Professor, (1970-2008)

Wadsworth, William B., B.A., M.S., Ph.D.
Professor, Geology (1972-1997)
Yocum, Glenn E.
The C. Milo Connick Professor of Religious
Studies (1973-77; 1978-2005)

DEPARTMENT CHAIRS 2009-2010
Art and Art History, Paula Radisich
Biology, David R. Bourgaize
Business Administration, Charles R. Laine
Chemistry, Devin Iimoto
Economics, Gregory R. Woirol
Education and Child Development, Kathleen Ralph
English Language \& Literature, Sean Morris
History, Elizabeth Sage
Kinesiology and Leisure Science, Patricia A. Van Oosbree

Mathematics, Jeff Lutgen
Modern Languages \& Literatures, Andrew Wallis
Music, Teresa LeVelle
Philosophy, Paul Kjellberg
Physics and Astronomy, Glenn Piner
Political Science, Deborah Norden
Psychology, David B. Volckmann
Religious Studies, Marilyn Gottschall
Sociology, Anthropology \& Social Work, sal a. johnston

Theatre \& Communication Arts, Jennifer Holmes
ACADEMIC
Auditing ..... 36
Education Rights and Privacy Act..........39-40
Grade Appeal Policy and Process. ..... 40-41
Grading ..... 42-44
Honesty ..... 28
Plagiarism ..... 28-29
Petitions, Policies \& Procedures ..... 31-32
Registration ..... 45
Review ..... 31-36
Withdrawal ..... 47-48
ACCREDITATION ..... 2
ADMINISTRATION ..... 227-228
ADMISSION ..... 9-11
Application Procedure ..... 13-14
Credential Program ..... 213
Early-Decision Plans. ..... 10
Freshman Admission. ..... y-10
Graduate Program ..... 213-220
internationai ..... 13
Non-Degree ..... 11
keadmission. ..... 45
Transfer Admission ..... 10
ADVANCED PLACEMENT. ..... 9, 37, 135-136
ANTHROPOLOGY ..... 191-194
APPLIED PHILOSOPHY ..... 160
ART \& ART HISTORY ..... 62-68
ASTRONOMY ..... 164-169
Al I ENDANCE PULICIES ..... 36
atiniting. ..... 36
BIOLOGY ..... 69-72
BROADOAKS SCHOOL ..... 55-56
BUILDINGS AND FACILITIES...(inside back cover)
BUSINESS ADMINISTRATION ..... 73-77
CALENDAR, ACADEMIC ..... 5-6
CAMPUS FACILITIES (inside back cover)
CAMPUS INN (inside back cover)
CAMPIJS MAP $\cap F$ (incide hark rover)
CARFFR PI ANNING ..... 73
CENTER FOR ADVISING AND ACADEMIC SUCCESS(CAAS).24
CHEMISTRY. ..... 78-81
CHILD DEVELOPMENT. ..... 95-98
CHINESE ..... 142-146
CLASS STANDING ..... 36
cúlígé lífe ..... 2u-21
COLLEGE WRITING PROGRAM ..... 82-85
COMMFNCFMFNT ..... 37
CUMPUIER SCIENCE ..... 140
COMPUTING SERVICES
Center for Advising and Academic Success (CAAS).24
Clift Microcomputer Lab ..... 57
GTE Language Resource Center ..... 57-58
Information Technology Services (IT) ..... 58
Math Lab ..... 58
CONCURRENT ENROLLMENT ..... 37
CONVOCATION ..... 8, 23
COUNSELING SERVICE ..... 24
COURSE NUMBERING SYSTEM ..... 59
COURSES OF STUDY ..... 59-61
CREDIT BY EXAMINATION ..... 37
CREDIT/NO CREDIT GRADING POLICY ..... 42
CUITURAI CENTER ..... 24-25
CURRICULUM ..... 49-58
DEAN'S LIST ..... 38
DEGREES ..... 49, 59-61
DIRECTORY
Administrative. ..... 227-228
Department Chairs ..... 238
Board of Trustees ..... 229-231
Faculty. ..... 232-238
DISABILITY SERVICES. ..... 25
DIVISIONS ..... 59
DROPPING COURSES ..... 5-6, 36, 47
ficoivionions ..... ธั่-ธ̄̄̆
FDUJCATION ..... 89-94
FMAII ..... 39
ENDOWED COLLEGE SCHOLARSHIPS. ..... 14-18
ENDOWED PROFESSORSHIPS. ..... 21-22
FNGINFFRING. ..... 90-101
ENGLISH LANGUAGE \& LITERATURE .... 102-109
FNVIR $\cap$ NMFNTAI CCIFNCF ..... 11ก-114
ENSEMRIES ..... 150
EXPENSES ..... 223-226
FACULTY. WHITTIER COLLEGE ..... 232-238
FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA) ..... 39
FEES AND EXPENSES ..... 223-226
Filivi Studies ..... 20ै3-20.4
FINAL EXAM POLICY ..... 40
FINANCIAL AID ..... 11-14
Financing Plans ..... 13-14
Need-Based Aid ..... 12-13
Scholarships. ..... 11-12
FOREIGN STUDY PROGRAMS (see International Programs) ..... 206
FRENCH. ..... 142-150
FRENCH CULTURAL STUDIES ..... 115
FRESHMAN WRITING PROGRAM. ..... 52. 82-84
GENDER AND WOMEN'S STUDIES ..... 116-117
git orat and cititijrai stiftifs ..... 118-170
GRADFS ..... 4)-44
Appeal Process ..... 40-41
incompiete Graủes folicy ..... 4
In Progress Grades Policy ..... 44
Policies and Procedures ..... 42-44
Reports ..... 46
GRADUATF FDIJC.ATION ..... 213-220
GRADUATE STANDING ..... 43
GRADUATION REOUIREMENTS
Undergraduate ..... 52-54, 133-135
Graduate ..... 215
HEALTH SERVICES ..... 25-26
HISTORY. ..... 121-125
HONORৎ AT COMMFNCFMFNT ..... 43
HONORS LISTS ..... 23. 43
HOUSING ..... 26-27
HUMANITIFS ..... 59
IN PROGRESS GRADES ..... 44
INCOMPLETE GRADES ..... 44
INDEPENDENT STUDY． ..... 44
INFORMATION TECHNOLOGY SERVICES ..... 58
INTERCOLLEGIATE ATHLETICS ..... 132
INTFRDISCIPI INARY $\subset \cap I T R ৎ F \subseteq$ ..... 1）6－178
INTERNATIONAL BACCALAUREATE ．．．9，37， 135
INTERNATIONAI PROGRAMS ..... 206
INTERNATIONAL STUDENTS． ..... 10－11
 ..... うう ジ
JANUARY INTERIM ..... 5－6
JAPANESE ..... 142，144， 150
KINFSIOI．OGY AND I．FISUJRF SC．IFNC．F ．129－132
LABORATORY FEES ..... 46
LAUTRUP－BALL CINEMA ..... 58
LAW SCHOOL ..... 221－222
LEAP（Leadership，Experience and Programs Office） ..... 26
LIBERAL EDUCATION ..... 133－135
LIBRARY ..... 54－55
MAJOR REQUIREMENTS ..... 53
MAJORS． ..... 60
MAP OF CAMPUS ..... （inside back cover）
MASTER＇S DFGRFF．S ..... 214－215
MATH LAB ..... 58
MATHEMATICS ..... 136－141
MATHEMATICS－BUSINESS ..... 141
MINUKS ..... 01
 ..... 33－34
MISSIUN SIAIEMENI ..... $8-9$
MODFRN I ANGUAGFS \＆IITFRATIJRFS 142－153
MUSIC ..... 1כ4－1כy
NATIONAL HONOR SOCIETIES． ..... 23
NATURAL SCIENCES ..... 59
NON－DEGREE STANDING ..... 11． 45
NONDISCRIMINATION ..... ．． 2
NUMBERING SYSTEM FOR COURSES ..... 59
ORIENTATION ..... 5－6
PERFORMING ARTS CENTER ..... 58
PETITION POLICY AND PROCEDURE ..... 31－32
PHILOSOPHY ..... 160－163
PHYSICAL EDUCATION AND RECREATION （see．Kinesiologv） ..... 129－132
PHYSICS ..... 164－169
PLAGIARISM ..... 28－29
POI ITICAI SC．IFNC．F ..... 170－175
PREPROFESSIONAL PROGRAMS ..... 207－210
Baccalaureate／Juris Doctorate $3 / 3$ ． ..... 210
Continuing Education ..... 210
Pre－Fngineering（3－7） ..... 207
Pre－Health ..... 207－208
Pre－Legal ..... 208
Pre－Therady ..... 208
১ocial Work ..... 2U8－2UY
leacher Education ..... $20 Y$
Urban Sturdies ..... 209－210
PRESIDENT＇S MESSAGE ..... ．． 7
PRIVATF INSTRIJCTION ..... 46156
PROBATION ..... 32－36
PSYCHOLOGY ..... 176－180
KEADMISSIUN ..... 45
REFUND POLICY ..... 223
REGISTRATION \＆CLASS SCHEDULING ..... 45
RFIIGIRITS STIIDIES ..... 181－184
KL．PEAIING COURSEWOKK． ..... 45
RFSIDFNTIAI IIVING ..... 26－27
ROTC． ..... 46
 ..... 11－12
SCIENTIFIC COMPUTING ..... 185
SHANNON CENTER FOR THE PERFORMING ARTS ..... 58
SOCIAL SCIENCES ..... 186－198
SOCIAL WORK ..... 195－198
SOCIOLOGY ..... 186－190
，PANISH ..... $142,144,151-153$
STUDENT
Academic Achievement ..... 23
Grade Renort ..... 4 K
Living． ..... ．26－27
Non－Degree． ..... 11． 45
Records ..... 39－40
Rights and Responsibilities． ..... 19， 27
STANDINNG
Academic ..... 32－34
Class ..... 30
Graduate ..... 43
Non－Degree ..... 11． 45
STIJDIO ART ..... 62
STIINY I $\cap A \cap$ ..... 4 K
SUMMER PROGRAM ..... 211
SUPPORT PROGRAMS \＆SERVICES ..... 54－58
SUSPENSION ..... 34
THEATRE ..... 58
THFATRF \＆ COMMIINICATION ARTく 109＿） 04
TR A חITIONS8
TRANSCRIPT ..... 47
TRANIGEED STUDENTTS
Admission ..... 9－11
Credits ..... 47
Graduation Deauirements ..... 54
TRUSTEES ..... 229－231
URBAN STUDIES ..... 212
VALUES ..... ．． 8
VISION ..... 8
WESTERN ASSOCIATION OF SCHOOLS AND
COLLEGES .2
WHITTIER COLLEGE LAW SCHOOL ．．．．．．．221－222WHITTIER SCHOLARS PROGRAM
Courses ..... 205
Requirements． ..... 51
Transfer from WSP to Lib Ed Program ..... 52
WITHDRAW／AI PQIICIES ..... $47-48$
WOMEN＇S STUDIES ..... 116－117
WKIIING LEN I EK（LAAS） ..... 24
WRITING PROGRAM ..... 5，82－85


[^0]:    *Individual courses are not offered every year, but are offered in a rotation that will provide students the ability to complete 18 credits over the course of the four year BA. Please check the most recent on-line schedule for offerings, credits, and instructors.

[^1]:    *Not offered every year.

[^2]:    *Not offered every year.

[^3]:    *Not offered every year.

[^4]:    *Not offered every year.

